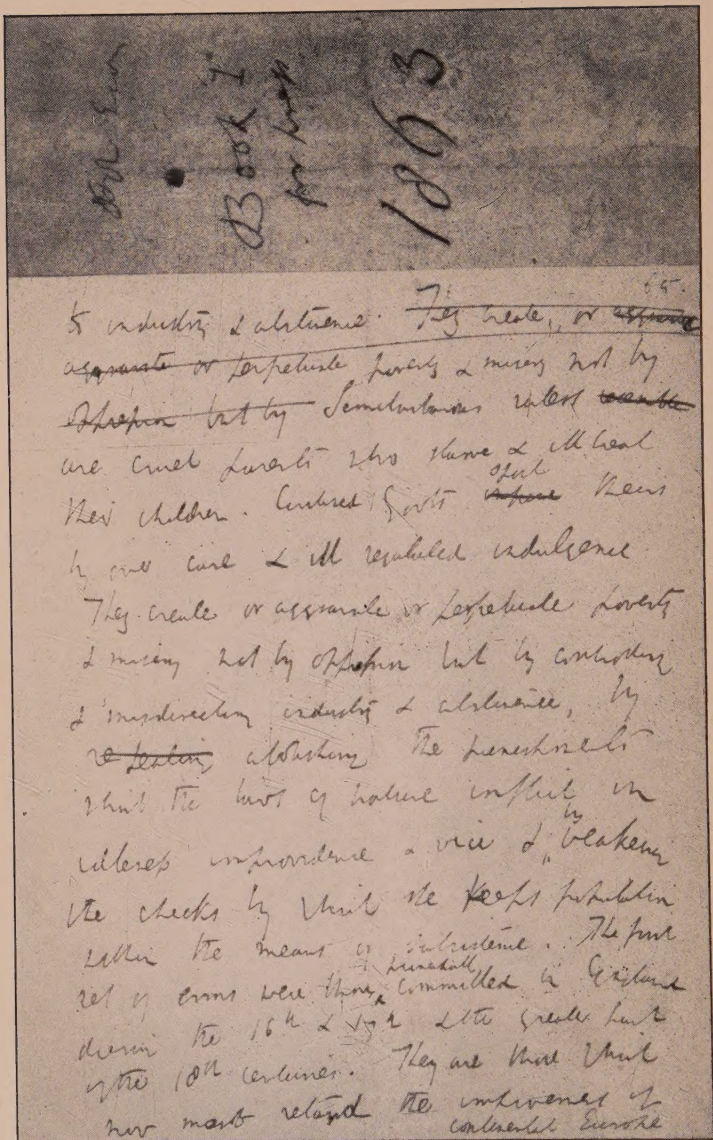




FACSIMILE OF SENIOR'S HANDWRITING REDUCED ABOUT ONE-HALF

Upper part—Notation on large manila envelope containing economic Mss. ready for the press.

Lower part—Sample page from one of these Mss. (Compare Volume II, page 287).

INDUSTRIAL EFFICIENCY AND SOCIAL ECONOMY

BY
NASSAU W. SENIOR

ORIGINAL MSS. ARRANGED AND EDITED

BY
S. LEON LEVY

VOLUME I



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FOREWORD

BY

MRS. ST. LOE STRACHEY, J. P.¹

Although my husband never lost interest in Mr. Leon Levy's arrangement and editing of my grandfather's Economic manuscripts, his American friends will know the sad reason why he was not able to fulfill his promise to contribute a foreword. The pen—never used for selfish or unworthy ends—has dropped from his hand—his wise and pregnant words have passed into the great silence. That the book is the poorer for this loss the editor would, I know, be the first to acknowledge.

But, though I can in no way fill my husband's place, it will, I think, add to the value of the book if I testify that this treatise on *Industrial Efficiency and Social Economy* was written by no dull and dry Professor of Political Economy. My grandfather was a man full of the ripe wisdom which comes by contact with the world of men. He was familiar with the intimate life not only of landlords, farmers, and laborers living under the conditions then governing rural England, but with that great world of seething political activity where the fortunes of Industrial England were shaped in those momentous years between 1820 and 1860.

Born in the last years of the Eighteenth Century, Nassau Senior was the eldest son of a country clergyman, whose family numbered no less than ten brothers and sisters. The young Nassau had to a certain extent his own way to make even in education, for his university career depended on his being elected as a demy of Magdalen College, Oxford. In 1810 he came up to London to begin his studies at the English Bar, and it was probably the accident of his becoming a pupil of Lord St. Leonards and forming warm ties of friendship with his chief, which gave him an entry into the political world, which led him in the end into the innermost circles of London Society. His youth, passed in a country parish, had made him familiar with the terrible conditions of the rural population of England, and my mother has always told me that as a boy he formed the fixed determination that he would devote himself to the reform of the English Poor Law. He was the first Professor of Political Economy at Oxford (1825) and became a member of the Poor Law Commission, and was, in fact, the author of the great report on which the Poor Law of 1834 was founded.

His friends in London comprised all the well-known figures in political and literary circles and, more than this, his wisdom and knowledge of men were increased by a wide circle of foreign friends. In 1833 a young man walked into his library in his house at Kensington and announced that he was Alexis de Tocqueville and had come from Paris to make Mr. Senior's acquaintance, and May, 1848, found him in Paris. Here,

¹ Mr. Nassau Senior's granddaughter.

viewing an apartment looking on the Place de la Concorde, the landlady threw open the window and exclaimed, "It is from this window, monsieur, that we watch our revolutions." From this time onward my grandfather kept a journal in which he recorded the conversations of all the distinguished men of the day. In the list of his published works these Journals—celebrated throughout the literary and political circles in Paris and London—hold a distinguished place. Most of them were actually published posthumously, edited by my mother. Several legible copies—my grandfather's handwriting was abominable—were, however, made of each journal and passed from hand to hand. The conversations themselves were always submitted to his interlocutor for correction. After the year 1848 Mr. Senior made a yearly visit to Paris where he had as many friends as in London. He was a *Membre Correspondant* of the Académie des Sciences Morales et Politiques—one of the five branches of the "Institut de France" founded by Richelieu in 1633.

It was always a source of regret to my grandfather and his American friends that he never crossed the Atlantic. My mother always told me that he had twice planned the voyage. The first time he was prevented by some public crisis—the second by the oncoming of the illness which was to end his life. Nevertheless, he had many distinguished American friends. Mr. Daniel Webster—who presented my grandfather with his bust—was a frequent visitor and Mr. Senior was on intimate terms with the successive distinguished American Ministers of the day. But the absence of an American Journal is greatly to be deplored.

Although owing to my mother's conversation my grandfather seems to me a real living figure, I myself never knew him. My grandmother was in delicate health and my mother was the devoted companion of his social life. Her marriage did not take place till nearly two years after his death. She spoke frequently to me of his breadth of view and wisdom, which were combined with a kindly humor which made him the most delightful of comrades.

Such was the man whose unpublished writings on Political Economy Mr. Levy presents in these volumes. Besides his distinction in the realm of political economy Mr. Senior was an eminently favorable specimen of the best type of Victorian public man. He never held office, and never even stood for Parliament, but his influence on public affairs was widespread and of long duration. He was, in fact, an excellent example of the political dictum which holds that in order to pull the strings it is necessary to stay behind the scenes.

EDITOR'S PREFACE

Senior's *Political Economy*, published in 1836 as an article in the *Encyclopedia Metropolitana*, has hitherto been regarded as the quintessence of his literary productions. Economists have generally taken it for granted that with the publication of that work the author's economic contributions prematurely came to an end. Thus, according to Professor Taussig, "Senior . . . the most acute critic of his day . . . began his contributions to economic literature with a burst of promising activity; lecturing at Oxford on value, on wages, on population, on international trade. . . . The matter of these lectures . . . was later . . . prepared . . . in the form of an article for *Encyclopedia Metropolitana*. With this article . . . his contributions to economic theory unfortunately came to an end. . . . His work was thus never carried beyond its first stage of promise; and his results were never maturely developed"—(*Wages and Capital*, pp. 197-198).

In consequence, however, of a happy accident, or more correctly of what Buckle would call the concatenation of favorable events, the editor has been privileged to unearth Senior's original manuscripts containing a wealth of important economic and historical data, the existence of which had never been surmised by political scientists. These original documents, constituting the author's matured views on the general principles of economics, have been carefully arranged in logical sequence and embodied in the present comprehensive work. There are several things which the reader will find it desirable to know before the plan of this treatise is explained in detail.

In the first place, it must be understood that this is mainly a work by Senior,—not a monograph *on* the author.

Second, though every word contained in this book, with the exceptions to be noted hereafter, is to be found in one or another of Senior's writings, yet, in so far as the arrangement of the component parts is concerned, the editor shares responsibility with the author.

Third, as intimated already, this work is not simply a reproduction of *one* original manuscript, nor is it merely an haphazard compilation of the author's newly discovered writings. Though our text is made up of many documents, composed by Senior on sepa-

rate occasions and with distinct plans, it is nevertheless arranged in such logical order as to constitute a thoroughly systematic treatise.

Fourth, the materials included in this work have very little to do with the general aspects of Senior's career and thought or with his activities as social reformer, nor do they cover everything that the author has written even on economic problems. The scope of this treatise is confined to Senior's *matured*, or latest, views on the *general principles of economics*. Other subjects of special interest are considered too, but merely as episodes.

The plan of this treatise is very simple. The text consists of ten parts, each of which is arranged into chapters. Every chapter is also subdivided into sections. On opening the book at random, one can see at a glance on the upper margin the part, chapter, and section numbers corresponding to the particular page under consideration. There are no footnotes to distract the reader's attention from the main theme of the discourse.

As will be noted, there are two distinct sets of references scattered throughout our text: (a) plain numbers, and (b) numbers preceded by asterisks (*). The plain reference numbers relate to the critical, historical, and explanatory notes grouped together at the end of each part. On the other hand, the starred reference numbers relate to the original sources for each passage listed in Appendix II, which will be described hereafter. In other words, there is but one series of starred reference numbers; whereas there are ten series of plain reference numbers, corresponding to the groups of notes presented separately at the end of each of the ten Parts into which the main text is divided. The reader will find it to his advantage to read those notes in connection with each part. By thus segregating the notes instead of combining them all together at the end of the work, the student's attention will naturally be directed to them at the proper time.

Appendix I contains a complete list of Senior's economic manuscripts and other writings, which have been utilized in the preparation of this work. Those writings are classified into seven groups, such as articles, lectures, reports, etc., and the individual items under each of those classifications are arranged in chronological order. References to all those sources are facilitated by the use of mnemonic symbols attached to each of the above-mentioned groups. Thus, the letter A refers to the group of Senior's articles published anonymously in the *Edinburgh Review*, and the symbol A⁵ relates to the fifth item given under that general heading.

All the documents listed in this Appendix are equally authentic. But to avoid any misunderstanding, the authenticity of all documents with respect to which some question may arise, is thoroughly established in the explanatory notes on Appendix I.

Appendix II contains a detailed record of the original sources from which each portion of the main text is taken. I have already remarked that the starred numbers located in different spots of the text—in fact, there are 402 such marks—refer to this Appendix. Each starred reference number indicates the *end* of a passage reproduced from one of Senior's writings. Appendix II gives a compilation of all of these starred reference numbers, showing the pages in the present work included thereunder, as compared with the corresponding pages of the original manuscripts. By noting the symbols for those documents, which are described in Appendix I, one can tell at a glance the date of each passage and the kind of source from which it is taken, such as lecture, article, report, etc.

The notes on Appendix II contain many concrete illustrations of the editorial method employed in selecting and arranging the various manuscripts and other documents which are incorporated in the text. As a general rule, the editor has endeavored to present the author's matured views on a given subject in as complete and systematic a form as possible, without encumbering the text with duplicate passages, half-digested or completely discarded views.

A list of the principal sources which Senior quoted in the various passages that have been incorporated in this treatise will be found in Appendix III. The edition to which the author refers has been indicated in each case, in so far as definite information in that respect is available.

The editor has scrupulously refrained from coloring the author's expressions with his own ideas, if any. As stated before, this is primarily Senior's work and all of the views attributed to him are expressed in his own words. This applies to the notes as well as to the text. However, the systematic arrangement of the heterogeneous documents of which this book is composed, has necessitated the insertion here and there of a word, a clause or a sentence so as to give harmony and continuity of expression. Such transitional phrases or connecting links, which the editor has thought appropriate to insert, are always inclosed in brackets. Similarly, all notes given at the end of each Part of this work,

with the exception of those used by the author himself, are inclosed in brackets. In the case an editorial note is based partly or wholly upon Senior's writings, the portion for which the author is responsible is quoted within brackets. The sources of such quoted matter are indicated by the mnemonic symbols referred to above in each note separately, that is to say, distinct from Appendix II which gives references only to the main text.

The use of square brackets does not apply to notes contained in the Appendix nor to the various topics and subtopics of this work—Parts, chapters, and sections—which, of course, are the editor's contributions. Another exception is the editor's substitution of the personal pronoun, singular for the plural form given in the original source, such as *I* instead of *we*, or *my*, in the place of *our*, in the case of material taken from Senior's anonymous articles or reports. Such substitutions are in conformity with Senior's own procedure, and hence are *not* put in brackets. (Compare, for instance, Appendix II, note 2.) Sometimes, however, a personal pronoun is used in one of those transitional clauses inserted by the editor, as in the expression, "In a former chapter *I* (meaning Senior) stated so and so." In all such cases the additional words *are* given in brackets.

The editorial method which has just been outlined may perhaps be criticized for its heterodoxy, for deviating in some respects from the usual mode of procedure. If, however, it has any merits at all the writer can scarcely claim full credit for them. Since the plan, with all its merits and defects, has largely been determined by two controlling factors: first, Senior's ambition and express desire to publish a comprehensive and systematic treatise on economics; and, second, the heterogeneous character of the documents that contain the author's matured views on his favorite subject.

These two factors I shall take up *seriatim*, though they are closely related to each other.

As regards the author's wishes in the matter, it is necessary to understand how his ambition originated and under what circumstances it evolved. In 1821, at the age of 31, Senior made his *début* in the economic world by publishing in the *Quarterly Review* an article on the Corn Laws, which included significant remarks on the general principles of production, value, rent, profit, wages, and of taxation. Two years later he was elected a member of the famous Political Economy Club in London, and

in 1825 he was appointed professor of political economy at the University of Oxford. During the following four years he wrote eight volumes of lectures, which are still extant in manuscript form.

According to the original rules governing the political economy professorship at Oxford, no person could hold that chair for more than five successive years. However, shortly after the expiration of that professorship another opportunity presented itself with the founding of King's College at London in 1831, when Senior was honored again by being duly elected for the economics professorship at that college. But before he had a chance to deliver his first lecture, it was discovered that some of his political views, particularly those on tithes and on the administration of the Anglican Church in Ireland, were opposed to the interests of the principal subscribers to King's College. Accordingly, that professorship was nipped in the bud.

In 1832 Senior was appointed a member of the Poor Law Inquiry Commission whose famous report, published in 1834 (according to hitherto unpublished documentary evidence now in the editor's possession), was largely the result of his painstaking efforts, and the main part of the text of that report was written by himself. After devoting several years to a study of the Factory Acts and to the writing of an elaborate report on the condition of the handloom weavers, he began in 1841 to pour out his lavish contributions to the *Edinburgh Review*. Yet he did not feel quite satisfied with his accomplishments in behalf of economic science.

Under date of January 27, 1847, he wrote to Macvey Napier, editor of the *Edinburgh Review*, "I feel that in writing on so many subjects I have in some measure wasted my opportunities, and that if I were now to die I should leave behind me only scattered fragments, and no great book. I have resolved therefore to write my 'great book,' which must be on Political Economy, as quickly as possible. If I am, as is possible, appointed Professor at Oxford next Easter, this will force me. But whether forced or not, I shall begin and go on with it" (Appendix I, M¹⁰).

In a previous letter, dated August 18, 1846, he had written to Napier, "As to the Oxford professorship, I feel that I am dissatisfied with the *form* of my writings. They are all reports, pamphlets, or contributions. I want to put my name to a book—and my best interest is Political Economy. By taking the professorship I force myself to go over the subject again, and devote my leisure to it exclusively. And the result will, I trust, be the

book in question. I have therefore said that though I will not ask for the professorship, I will take it if offered. And when you consider how I am opposed to the great majority of the university in politics and in opinions, and how little I have disguised my opinions, you must admit that they will be magnanimous if they offer it to me, as I have every reason for believing that they will do. . . . My lectures will certainly not be a sham. They will be my book" (Appendix I, M⁹).

In 1847 Senior was again elected to occupy the chair of political economy at Oxford, and in the next five years he wrote the lectures (Appendix I, Ln), which constitute the core of this work. At the expiration of that professorship he began to revise the lectures so as to incorporate them in his *magnum opus*. But other matters interfered with his plans. After the Revolution of 1848, which Senior attributed largely to communist and socialist propaganda, he took a keener interest in Continental affairs. He traveled much in France, Italy, and in other countries, and he recorded his observations from day to day in his voluminous Journals.

In spite of these and other activities, he never relinquished the hope of finishing his masterpiece, for there is evidence that in 1863 and even shortly before his death in 1864 he was still busy in trying to remodel and bring it up to date. Let us now examine the status of the final revision.

It will be noted in Appendix I that the introductory lectures on political economy (Ln¹⁻⁴) delivered before the University of Oxford in 1847, were published in 1852. The printed lectures appear to have been revised and rearranged on two occasions, but the dates cannot be definitely ascertained. In the first revision those lectures were grouped under the general heading of "Introduction," subdivided into "chapters," as follows:

Chapter		Lecture
I	=	1
II	=	2 and 3
III	=	4

This arrangement, however, appears to have been discarded as the word "Introduction" is crossed out and "Book I" with other chapter numbers are substituted for the previous headings. The latest plan, then, is in the form of Books (titles not given) subdivided into chapters with no other subtitles. Let us compare the details of this revision with the previous arrangement.

BOOK I		FIRST COURSE
Chapter		Lecture
I	=	1
II	=	2
III	=	3
IV	=	4 (up to page 67)
V	=	4 (pages 67 to 76)
VI	=	5 or 9
VII	=	—
VIII	=	8

It will be noted that there are no chapter headings corresponding to lectures 6 and 7. Lecture 5 was first changed to "Book I, Chapter VII" and its original pagination was also changed so as to follow Lecture 9, i. e., Chapter VI. This arrangement is still retained throughout the pages (with one exception) including the 12 additional pages which appear to have been inserted sometime after 1857. But on the cover and on the first page "Chapter VI," was substituted for "Chapter VII." Lecture 8 was marked "Book I, Chapter VII," on the first page, but that notation was later crossed out and all the pages were marked "Book I, Chapter VIII." Lecture 9 contains many chapter numbers all of which are crossed out except "Book I, Chapter VI." The latter notation is given on every page of the original lecture. Thus we have two lectures (5 and 9), both of which are marked "Book I, Chapter VI," according to the last wishes of the author, and two other lectures (6 and 7) belonging to the same course with no chapter markings at all. On the other hand, Chapter VII is left with no corresponding lecture heading. The arrangement of Book II is still less satisfactory.

BOOK II		SECOND COURSE
Chapter		Lecture
I	=	1
II	=	2 (plus lecture 7, pages 16-32, renumbered 84a-100)
III	=	—
IV	=	—
V	=	5 or 7 or 9
VI	=	6 or 8
VII	=	3
VIII	=	4

The chapter numbers specified above represent the latest revisions, but there were other changes before. Lecture 3 was first changed to "Book II, Chapter III," and this notation is retained on all the pages, but on the cover the "III" is replaced by "VII." Lecture 4 was first marked on all the pages, "Book II, Chapter IV." The "IV" was later changed throughout the pages to "VII." But on the cover the "VII" was changed to "VIII."

Lecture 5 was marked throughout the pages "Book II, Chapter V." Lecture 6 was marked "Book II, Chapter VI" on the cover and on the first page. Lecture 7 was also marked "Book II, Chapter V," though the earlier notations were "Chapter VII" and "Chapter III," both of which were crossed out. Lecture 8, like lecture 6, was finally marked on all the pages "Book II, Chapter VI," though at an earlier date it was marked "Book II, Chapter IV" (later crossed out). Lecture 9 was first marked on all the pages "Book II, Chapter VI." But on the cover "V" was substituted for "VI."

Thus we have three lectures of the second course (new series), all of which are marked "Book II, Chapter V"; lectures 6 and 8 both marked "Book II, Chapter VI"; and no lectures at all for the proposed Chapters III and IV. No book and chapter numbers are marked on any of the other lectures.

It appears from the preceding data that the author must have been struggling to find a plan for the systematic arrangement of his raw materials, but that, for one reason or another, his efforts in that direction have not been consummated. We therefore have two kinds of original arrangements, as far as this particular series of MSS. (Ln) is concerned: (1) partly by books divided into chapters, with all the shortcomings referred to before; and (2) partly by lecture headings. There are no other topics or subtopics.

If, however, the new series of lectures were the only documents to be taken into consideration our problem would have been relatively easy. But a glance at Appendix I will reveal a different situation. Senior was an indefatigable worker and his literary contributions are more extensive than has generally been supposed. From the standpoint of this work, those contributions may be divided into three classes: (a) those which treat exclusively of economic principles; (b) those which are devoted entirely to topics other than economics; and (c) those which contain a mixture of economic and other subjects.

Under the first head are included all the lectures on political

economy—both the old and the new series—and also some of the articles.

The second group of documents has reference to the author's life and times, his views on politics, religion, etc. This group includes historical material bearing upon the origin and development of some of his economic ideas, such as those embodied in the famous Poor Law Report of 1834 mentioned before. It also includes most of his essays on biography, fiction, philosophy, etc. Evidently, these documents do not fall within the scope of the present work (compare Appendix I, note 1).

The third class includes articles, government reports, addresses before learned societies, pamphlets, correspondence, journals, and conversations with distinguished persons. All of these documents contain more or less materials bearing upon the general principles of economics.

With respect to the first and third groups of Senior's writings—those which are devoted wholly or partly to economic subjects—the problem was first, how to determine what portions should be included or excluded; and second, how to arrange the heterogeneous materials finally selected for the purposes of this treatise.

As regards the question of selection, it was clear that from the third group of documents should be excluded all those portions which, like the second group, had nothing to do with economics. All the other materials—whether falling under the first or the third group of documents—were again classified under two heads: (a) those embodying Senior's early views on economic principles; and (b) those in which his mature thoughts on economics are expressed. Thus, the old economic lectures (Lo), in so far as they have been superseded by later writings, were considered as belonging to the first class, and the new lectures (Ln) under the second class.

The purpose of this classification was to eliminate duplicate passages and discarded views. Many examples of such duplications will be found in the notes on Appendix II. To facilitate comparison of parallel passages, it was found convenient to make abstracts on index cards of different shades. With the aid of those cards, classified by subjects with cross references, it was possible to tell at a glance the sources of a given passage and to what extent it was superseded by later materials.

While admitting the need of eliminating duplicate passages, it may be asked, Why bother about the whole matter—why add or

subtract anything—does not the second series of lectures constitute the *whole* system of Senior's economic thought in the latest form? The answer is decidedly, No! Take, for instance, Senior's address on the subject of *Economic Science and Statistics* (RAP¹⁶), delivered in 1860 before the British Association for the Advancement of Science. What ground was there for excluding that address, or for considering it as of less importance than the lectures? Another instance is the article on *John Stuart Mill's Political Economy* (A⁷), of which ninety-nine economists out of one hundred are probably unaware that Senior was the author. That article alone, published during the period when the second series of lectures was being written, is a sort of miniature treatise on the fundamental principles of economics. To be sure, certain parts of it are duplicated in the new lectures; but it contains also materials, such as those on Distribution, which, though forming an essential part of the author's economic system, are not found in those lectures. In Volume I, page 253 of our text, which is taken from one of the new lectures, Senior refers to the theory of profit and rent—a subject on which, he states, "I shall have to remark when I come to consider Distribution." Yet, that subject, as stated already, is scarcely touched upon in the new lectures.

Again, the discussion of money, credit, and exchange is certainly an integral part of Senior's economic thought, yet the bald fact remains that this subject is not treated in the new lectures. There is a remote probability that some of those lectures may have been lost or misplaced, but personally I do not share this view (see Appendix I, notes 3 and 4). Similarly, the theory of wages is not completely covered by the new lectures (see Appendix I, note 5).

Assuming, however, that the materials included in the present work have been properly selected and nothing of importance left out, there still remained the important problem as to how all those miscellaneous documents should be put together.

At first blush, two courses seemed to be theoretically possible: either to utilize the materials in the form of a monograph on Senior, or to reprint them all exactly as they were originally composed. It is scarcely necessary to dwell at length on the impracticability of both of those plans.

The first method would have required endless chains of quoted passages interspersed with editorial comments, thus tending to divert the reader's attention from the trend of the original text. As the materials would necessarily have been abridged and para-

phrased, the editor would have merited severe criticism for "doctoring" the author's views to suit his personal bias. On the other hand, the second plan would have produced a jumble of ideas (including those which the author had long discarded) on many subjects, with numerous duplications, which would have been repulsive to most readers, and contrary to the author's aim of bringing out a systematic work devoted exclusively to the general principles of economics.

We have seen that the economic documents under consideration, though composed at different times, under dissimilar circumstances, and with distinct plans of arrangement, are nevertheless inseparably related to one another. In view of the fact that Senior has left no definite plan for the publication of those heterogeneous papers, it was necessary for the editor to devise a logical method in harmony with the general scheme of the author's economic system, as reflected more or less clearly in his latest works.

The results of this method have been checked and counterchecked with great care. Practically every chapter was reviewed by at least two, and in some instances three or four economists, who were requested to criticize the author as well as the editor. The purpose was to detect defects, of omission or commission, if any, for which the editor might be held accountable. Some of the critics have been good enough to write notes, which will be found at the proper places duly credited.

The editor acknowledges his indebtedness to the following persons whose criticisms or suggestions have helped directly or indirectly to improve this work: Professor Edwin R. A. Seligman, Columbia University, in whose lecture room I first received the impulse to study intensively the works of Senior; Professor Richard T. Ely, Director, Institute for Research in Land Economics; Mr. George Parmly Day, President, Yale University Press; Professor John R. Commons, University of Wisconsin; Professor Benjamin H. Hibbard, University of Wisconsin; Professor William A. Scott, University of Wisconsin; Professor Frank A. Fetter, Princeton University; Professor Herbert J. Davenport, Cornell University; Professor Jacob H. Hollander, Johns Hopkins University; Professor Henry R. Mussey, formerly Executive Secretary, People's Legislative Service, at Washington; Dr. Willford I. King, National Bureau of Economic Research; Dr. Walter W. Stewart, formerly Director, Division of Research and Statistics, Federal Reserve Board; Dr. George P. Watkins, Federal Trade Commission; Professor Ernest

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PART I
INTRODUCTION

CHAPTER I

THE PURPOSE, SCOPE, AND METHOD OF ECONOMIC SCIENCE*

1. The Aims of Science and Art: Teaching vs. Preaching. 2. Distinction between Mental and Physical Studies. 3. The Province of Political Economy. 4. The Relation of Economics to Statistics. 5. The Foundation of Economics: Positive Facts, not Hypothetical Premises.

1. The Aims of Science and Art: Teaching vs. Preaching. [The reader scarcely need be reminded that] a science is a statement of existing facts, an art a statement of the means by which future facts may be brought about or influenced. A science deals in premises, an art in conclusions. A science aims only at supplying materials for the memory and the judgment. It does not presuppose any purpose beyond the acquisition of knowledge.¹ An art is intended to influence the will: it presupposes some object to be attained, and it points out the easiest, the safest, or the most effectual conduct for that purpose.*¹ It is for this reason that the collection of related facts which constitute a science is generally a less complex thing than the collection of related precepts which constitute an art. A single science may be complete in itself;—a man may confine himself to chemistry, or to zoölogy, or to botany. He may pursue any one of these sciences to the boundaries of existing knowledge, and know nothing of the others. But an art must draw its materials from many sciences. No man can teach or practice well the art of agriculture unless he have some knowledge of chemistry, botany, zoölogy, mechanics, and indeed of many other sciences.

In the progress of human knowledge art precedes science. The first efforts of man are practical. He has an object in view, and tries various means of accomplishing it. Some of these utterly fail, some succeed imperfectly, and others are effectual, but at an unnecessary expense of time and trouble. As his experience increases, he gradually lays down for himself certain practical rules.

* *References to Sources* (see Appendix II).

If the business in which he is engaged can be managed by a solitary individual, these rules may be known only to himself, and be lost at his death. It is thus that we have lost many of the secrets of the ancient painters. But if it be one that requires coöperation, they become known to his assistants and to his pupils, and gradually to all who are engaged in similar pursuits. Many minds are employed in improving them and in adding to their number, until at length they swell into a system. It may be long, however, before they exist in any but a traditional form. The great architects of the middle ages left behind them no written precepts. They taught their pupils by oral instruction, and the rest of the world and posterity by example. The desire, however, to communicate and perpetuate information is one of the strongest passions of inventive minds. As books multiply and become the principal means by which this can be effected, those who are conscious of superior knowledge become writers. They compose treatises in which the means which are supposed to be productive of certain effects are arranged and preserved; and the knowledge which previously rested on individual experience or traditional routine becomes an art.

With the exception, however, of poetry, architecture, and generally of the arts that are addressed to the taste and the imagination, for which nations in an early stage of civilization have a peculiar aptitude, the arts of an unscientific age contain many rules ineffectual for their intended purposes, and many that are positively opposed to them. Thus the medicine of the middle ages ordered plants with yellow flowers to be used in cases of jaundice, and those with red flowers in fevers, and directed fomentations and ointments to be applied not to the wound but to the sword. At length a man arrives with wider views or less docile habits of mind, who is not satisfied to obey what often appear to him to be arbitrary rules, though he is told that they are the results of experience. He endeavors to account for the effects which he sees produced, that is to say, to refer them to some general laws of matter or of mind. To do this is to create a science. As soon as scientific habits of thought prevail, men are teased by any appearance for which they cannot account. Their first impulse is to question its reality. Evidence of mesmeric clairvoyance has been produced enough to satisfy a skeptical inquirer, if the phenomenon itself could be accounted for. But we cannot refer it to any general law, and therefore the greater part of those who think about it, deny its existence; many suspend their opinion, and scarcely any are com-

plete believers. If its existence should ever be thoroughly established, the whole scientific world will be engaged in searching for the general principles to which it is to be referred; for no one will be satisfied with accepting it as an insulated unexplained fact.

I have said that a single art generally draws its premises from many different sciences. So a single science generally affords premises to many different arts. How numerous are the sciences which are applicable to the art of war! How numerous are the arts which depend in part on the science of chemistry! And it is obvious that every increase of human knowledge must increase the influence of science on art. Under this influence many new rules are laid down, and many, which were supposed to be founded on experience, are abandoned as unnecessary or injurious. The art becomes in some respects more simple and in others more complex: more complex because its precepts become more diversified and more detailed; more simple because, instead of being thrown together with little apparent connection, they are grouped under the general principles supplied by science.*²

2. Distinction between Mental and Physical Studies. Sciences are divided into two great classes, differing both as to the matters which they treat, and the sources from which they draw their premises. These are the physical and the mental, or, as they are sometimes called, the moral sciences. The proper subjects of the first are the properties of matter; those of the second are the sensations, faculties, and habits of the human mind. As we have no experience of mind separated from matter (perhaps indeed are incapable of conceiving its existence), and as the mind can act only through the body, even the more purely mental sciences are forced to take notice of matter; and many of them, such as the sciences which have been called æsthetic—those which account for the pleasure which we derive from beauty and sublimity—seem at first sight to treat of little except material objects. But they consider those objects merely with reference to their effects on the human mind. To classify and account for those effects as a part of the philosophy of mind is the purpose of the science, and it regards in matter only the qualities which produce them. On the other hand, a botanist in the description of plants cannot omit the qualities which render them agreeable or useful to man. Without doubt, to be pleased by the sight and smell of a rose is as much an attribute of the human mind as the form, color, and other qualities which occasion that pleasure are attributes of the rose. But it is

to the rose only that the botanist looks. He states that it is beautiful and odoriferous as a part of the description of the plant, not of that of the being to whom it is beautiful and odoriferous.

The same difference separates arts, though the line is less clearly marked. For as every art must use material instruments, it is to a certain extent physical; and as every art aims at producing pleasure or preventing pain, it must be, to a certain extent, mental. Still, however, the difference exists. No one would call rhetoric a physical art, though its teacher must deliver precepts as to voice and gesture. No one would call agriculture a mental art, though a treatise on agriculture would be incomplete which did not compare the advantages and disadvantages of task-work and day-work—a comparison involving wide and numerous moral considerations.

Where the subject is matter the distinction between an art and a science is in general easily perceptible. No one confounds the science of projectiles with the art of gunnery, or the art of surgery with the science of anatomy. But it appears to be much less easy to distinguish the arts and the sciences which have for their subject the operations of the human mind. Thus we often talk of the art of logic, and of the science of morality. But logic is not an art but a science. It is not a collection of precepts how to reason, but a statement of the principles on which all reasoning depends. The logician does not advise, he merely instructs. He does not teach us to argue by means of syllogisms, but asserts the fact that all reasoning is syllogistic. His statements are all general; they have no relation to time or to place. They are unconnected with any science but his own.

On the other hand, morality is not a science but an art. The object of the moralist is not to inform us as to the nature of the faculties and the sensations of man, but to advise us how to use those faculties, and how to subject ourselves to those sensations, for the purpose of promoting our happiness. He must therefore draw his materials from many different sciences, and must vary his precepts according to the social condition of those whom he addresses. The morality of the Stoics was fitted to an aggregate of petty communities constantly engaged in foreign and civil war, in which defeat involved the worst of human evils—the loss of life, of relations, of property, and of liberty. No Greek could be sure that in a year's time his country might not be conquered by a neighboring tribe, or his party overthrown by a revolution, and all his family and friends murdered before his eyes, or sold with him into slavery. Under such

circumstances insensibility, the power of enduring the approach and the presence of evil, and the insecurity, and even the absence of good, appeared to be the quality most conducive to happiness. The Stoic moralist, therefore, was as anxious to blunt the desires and harden the perceptions of his pupils, as the English moralist is to rouse their ambition, and to expand their sensibility. The logic of Aristotle and the logic of Whately are the same, but how little do we find in common when we compare the morality of Zeno with that of Smith or of Paley.

The greater tendency to confound science and art, when the subject is mind, than when it is matter, probably arises from the more immediate influence on human conduct possessed by the mental sciences. The sciences which consider matter have often little apparent connection with any of the arts to which they are subservient. Such sciences may be, and indeed generally are, most earnestly studied by men who have no object beyond the discovery and diffusion of truth. That object is enough to satisfy the most ardent scientific ambition, and to urge to the most unwearied scientific labors. The astronomer does not consider what will be the practical results of his inquiries, or whether they will lead to any practical results whatever. His object is knowledge. The uses to which that knowledge may be applied, the mode and the degree in which it may affect men's conduct, he leaves to others.

On the other hand, the mental sciences are directly and obviously connected with the arts of which they furnish the principles; and those arts almost every educated man must practice. No man studies the science of reasoning without resolving to apply its principles whenever he has to exercise the art of controversy. No man inquires into the laws which regulate the human intellect or the human passions, without framing out of them some practical rules for the employment of his own faculties and the regulation of his own affections.

The distinction between physical and mental is important, not only with respect to the subjects treated by the sciences and arts in each class, but also with respect to the principal sources from which they respectively draw their premises.

In all sciences and in all arts these sources are but three—observation, consciousness, and hypothesis. The physical sciences, being only secondarily conversant with mind, draw their premises almost exclusively from observation or hypothesis. Those which treat only of magnitude and number, or, as they are usually called,

the pure sciences, draw them altogether from hypothesis. The mathematician does not measure the radii of a circle in order to ascertain that they are all equal: he infers their equality from the definition with which he sets out. Those which abstain from hypothesis depend on observation. It is by observation that the astronomer ascertains the motions of the planets, the botanist classifies plants, and the chemist discovers the affinities of different bodies. They disregard almost entirely the phenomena of consciousness. The physical arts are almost exclusively based on observation. As their object is to produce positive effects, they trust as little as possible to hypothesis; and the mental phenomena which they have to consider are generally few and simple. The art of navigation, the art of mining, or the art of fortification, might be taught by a man who had never studied seriously the operations of his own mind.

On the other hand, the mental sciences and the mental arts draw their premises principally from consciousness. The subjects with which they are chiefly conversant are the workings of the human mind. And the only mind whose workings a man really knows is his own. When he wishes to ascertain the thoughts and the feelings of others, his first impulse always is, to endeavor to suppose himself in what he believes to be their situation, and to consider how he himself would then think and feel. His next impulse is to infer that similar moral and intellectual processes are taking place in them. If he be a cautious observer, he endeavors to correct this inference by examining their countenances, their words, and their actions. But these are uncertain symptoms, often occasioned by a state of mind different from that which they appear to indicate; and often employed for the purpose of concealment or of deception.

When a man endeavors to discover what is passing in the mind of another, by reflecting on what has passed or is passing in his own, the certainty of the result depends of course on the degree in which the two minds coincide. The educated man, therefore, estimates ill the feelings and the faculties of the uneducated, the adult those of the child, the sane those of the insane, the civilized man those of the savage. And this accounts for the constant mismanagement of the lower orders, and of children, madmen, and savages, by their intellectual and moral superiors. The student of mental science is in the situation of an anatomist, allowed to dissect only a single subject, and forced to conjecture the internal conformation of other men by assuming that it resembles that of the subject which

he has dissected, and correcting that assumption only by observing the forms of their bones and the outward play of their muscles. The mental peculiarities of other men are likely to mislead him in particular instances. His own mental peculiarities are likely to mislead him on all occasions.

Another important difference, between mental and physical studies, is the degree and the manner in which they respectively can be aided by experiment. When we are dealing with matter, we frequently are able to combine its particles at will, and to ascertain the results of the combination. If we find that, all other things remaining the same, the presence or absence of a given element is followed by the presence or absence of a given result, we ascribe to that element and to that result the relation of cause and effect, or at least of condition and result.

But we can scarcely be said to be able to make experiments on the minds of others. It is necessary to an experiment, that the observer should know accurately the state of the thing observed before the experiment, and its state immediately after it. But when the minds of other men are the subject, we can know but little of either the one state or of the other. We are forced, therefore, to rely not on experiment, but on experience; that is to say, not on combinations of known elements effected for the purpose of testing the result of each different combination, but on our observation of actual occurrences, the results of the combination of numerous elements, only a few of which are within our own knowledge. And the consequence is, that we frequently connect facts² which are really independent of one another, and not infrequently mistake obstacles for causes.*³

When we direct our attention to the workings of our own minds, that is to say, when we search for premises by means of consciousness instead of by means of observation, our powers of trying experiments are much greater. To a considerable degree we command our own faculties; and though there are few, perhaps none, which we can use separately, we can at will exercise one more vigorously than the others. We can call, for instance, into peculiar activity, the judgment, the memory, or the imagination, and note the differences in our mental condition as the one faculty or the other is more active. And this is an experiment. Over our mental sensations we have less power. We cannot at will feel angry, or envious, or frightened. But we can sometimes, though rarely, put ourselves really into situations by which certain emotions will be

excited. And when, as is usually the case, this is impossible or objectionable, we can fancy ourselves in such situations. The first is an actual experiment. We can approach the brink of an unprotected precipice and look down. We can interpose between our bodies and that brink a low parapet, and look over it. And if we find that our emotions in the two cases differ—that though there is no real danger in either case, though in both our judgment equally tells us that we are safe, yet that the apparent danger in the one produces fear, while we feel secure in the other—we infer that the imagination can excite fear for which the judgment affirms that there is no adequate cause. The second is the resemblance of an experiment, and when tried by a person with the vivid imagination of Shakespeare or Homer may almost serve for one. But with ordinary minds it is a most fallacious expedient. Few men when they picture themselves in an imaginary situation take into account all the incidents necessary to that situation. And those which they neglect may be among the most important.* ⁴

3. The Province of Political Economy. Economic science, or, to use a more familiar name, “the science of political economy,” may be defined as “the science which states the laws regulating the production and distribution of wealth, so far as they depend on the action of the human mind.”

I say, “so far as they depend on the action of the human mind” in order to mark to which of the two great genera of sciences, the material (or, as they are usually called, the physical) and the mental (or, as they are frequently called, the moral) sciences, political economy belongs.* ⁵

Unquestionably the political economist has much to do with matter. The phenomena attending the production of material wealth occupy a great part of his attention; and these depend mainly on the laws of matter. The efficacy of machinery, the diminishing productiveness, under certain circumstances, of successive applications of capital to land, and the fecundity and longevity of the human species, are all important premises in political economy, and all are laws of matter. But the political economist dwells on them with reference to the mental phenomena which they serve to explain; he considers them as among the motives to the accumulation of capital, as among the sources of rent, as among the regulators of profit, and as among the causes which promote or retard the welfare of mankind, so far as that welfare depends on wealth. If the main subject of his studies were the

physical phenomena attending the production of wealth, a system of political economy must contain a treatise on mechanics, on navigation, on agriculture, on chemistry—in fact, on the subjects of almost all the physical sciences and arts, for there are few of those arts or sciences which are not subservient to wealth.

All these details, however, the political economist avoids, or uses a few of them sparingly for the purpose of illustration. He does not attempt to state the mechanical and chemical laws which enable the steam engine to perform its miracles—he passes them by as laws of matter. But he explains, as fully as his knowledge will allow, the motives which induce the mechanist to erect the steam engine, and the laborer to work it. And these are laws of mind. He leaves to the geologist to explain the laws of matter which occasion the formation of coal, to the chemist to distinguish its component elements, to the engineer to state the means by which it is extracted, and to the teachers of many hundred different arts to point out the uses to which it may be applied. What he reserves to himself is to explain the laws of mind under which the owner of the soil allows his pastures to be laid waste, and the minerals which they cover to be extracted; under which the capitalist employs, in sinking shafts and piercing galleries, funds which might be devoted to his own immediate enjoyment; under which the miner encounters the toils and the dangers of his hazardous and laborious occupation; and the laws, also laws of mind, which decide in what proportions the produce, or the value of the produce, is divided between the three classes by whose concurrence it has been obtained.

When he uses as his premises, as he often must do, facts supplied by physical science, he does not attempt to account for them; he is satisfied with stating their existence. If he has to prove it, he looks for his proofs, so far as he can, in the human mind. Thus, Sir Edward West proved that additional labor cannot be applied to a given extent of land to an indefinite amount with a proportionate return, by showing, on the principles of human nature, that, if it were otherwise, no land except that which is most fertile and best situated would be cultivated. All the technical terms, therefore, of political economy, represent either purely mental ideas—such as *demand*, *utility*, *value*, and *abstinence*—or objects which, though some of them may be material, are considered by the political economist so far only as they are the results or the causes of certain affections of the human mind—such as *wealth*, *capital*, *rent*, *wages*, and *profits*.*⁶

Political economists have sometimes been blamed for not sufficiently attending to questions of morals and happiness, for considering everything with a view to the riches of a country, and nothing with a view to its honor or its virtue. I wish this censure had been universally deserved. I wish that political economists had given to wealth the exclusive attention which these remarks suppose, and which I hope to give to it myself. It is impossible that any science can make that approach to perfection which is allowed to our faculties to carry it unless the field of investigation is accurately limited: unless the student sees clearly what is the object of his inquiries, and is on his guard against deviating into extraneous investigations. The subject which, in common with almost every professed writer on political economy, I propose to investigate is wealth; I have nothing to do with morals or legislation, any more than I have with agriculture, chemistry, or mechanics, except so far as they influence wealth. I do not inquire what will make men virtuous or happy; I inquire only what will make them rich. I do indeed believe that the diffusion of a certain amount of wealth among a people—that amount which shall exempt them from the pressure of immediate, or the well-founded apprehension of future want—is essential to their virtue and their happiness, is essential to their possessing the higher qualities of a responsible and intellectual being. I believe also that the amount of wealth which a people can acquire and preserve depends principally upon their habits and their institutions. With these opinions I necessarily place political economy among the first of moral sciences.

But if there are any who believe wealth to be rather an evil than a good, or its *production and distribution* not to *depend on human institutions*, even to such persons the study of wealth would still be a subject of great interest. To the first class, in order to frame, as Lycurgus is said to have framed, laws to prevent its increase; to the second on the same grounds, as those on which we study the planetary motions though they depend on causes not within our control. Those only are justified in blaming political economists for considering everything with reference to wealth who either deny that human knowledge is best extended by confining the attention at one time to one set of phenomena, or who believe the influence of wealth on the moral and intellectual improvement of man to be so trifling; who believe that a people, under the constant terror of want, and subject to unremitting toil in the attempt, sometimes the vain attempt to avert it, differ so little in virtue and in happiness from a

population whose subsistence is ample, and secure, that the whole subject is unworthy of scientific investigation.*⁷

The subject matter of political economy is, I repeat, wealth. The political economist, *as such*, has nothing to do with any of the other physical or moral sciences, or with any of the physical or moral arts, excepting so far as they affect the production or distribution of wealth. Whether wealth be a good or an evil, whether it be conducive to human morality or to human happiness, that it be hoarded or that it be consumed, that it be accumulated in masses, or that it be generally diffused, are questions beyond his science. His business is to state what are the effects on the production and distribution of wealth, or, to use a shorter expression, the economic effects of accumulation and of expenditure, of the different kinds of consumption, and of the aggregation in a few hands, or the division among many, of the things of which wealth consists. Whenever he gives a precept, whenever he advises his reader to do anything, or to abstain from doing anything, he wanders from science into art, generally into the art of morality, or that of government.*⁸

4. The Relation of Economics to Statistics. The science of statistics is far wider as to its subject-matter. It applies to all phenomena which can be counted and recorded. It deals equally with matter and with mind. Perhaps the most remarkable results of the statistician's labors are those which show [that] the human will³ obeys laws nearly as certain as those which regulate matter.

There are countries in which we find year after year the same number of marriages at the same ages and in the same proportion to the population, the same number of children to a marriage, the same number of bankruptcies, and the same number of crimes and suicides, committed at the same ages and by each sex, in permanent proportions; in which the average height, the average weight, the average consumption and production of commodities, and the average longevity, of men and of women, continue for long periods unaltered.

There are others in which the number or the proportion of these events varies; in which marriages, births, deaths, consumption and production, and even the average stature are different at different periods. This uniformity, or these differences, are detected by the statistician. His task is over when he has stated and recorded them. It is the business of the legislator to draw from the figures of the statistician practical inferences: to ascertain the circumstances (moral, commercial, or political) under which the tribute paid by his

countrymen to insolvency, crime, sickness and death, has been increased, has been diminished, or has remained stationary. These circumstances will often appear to be under control, and by watching the statistical results of every attempt to control them, he will ascertain whether they *are* under control or not.

We have been told that a statesman reads his history in a nation's eyes. I should rather say that he reads it in a *nation's figures*.

But it is not only to the statesman that statistics are useful, many of the most important and most useful employments of capital depend on them. Vital statistics are the base of life insurance. They decide the value of annuities, of life estates, and of reversions. Every man in the management of property has to consult them. The statistics of fires regulate fire insurance, those of wrecks regulate marine insurance. Wherever the success or failure of an undertaking depends on the calculation of chances, and wherever the events subject to those chances have been observed and recorded in numbers sufficient to afford an average, the prudence or imprudence of the undertaking depends on that average. To *give* that average is the business of the statistician. To *act* on it is the business of the speculator. If in London one house in two thousand were burnt down every year, nothing would be gained or lost by insuring houses in London at a shilling per cent per annum. If one in a thousand were burnt down, such insurance would be ruinous. If only one in three thousand, it would be very profitable.

But, I repeat, that the observation, the recording and the arranging facts, which is the science of statistics, and the ascertaining, from observation and from consciousness,⁴ the general laws which regulate men's actions with respect to production and exchange, which is the science of political economy, are distinct from the arts to which these sciences are subservient. We cease to be scientific as soon as we advise or dissuade, or even approve or censure. I believe that in mental, as in manual arts, the division of labor is useful. Within the strict limits of economic science and statistics a large field is open to us. It appears to me that we shall do well, if, as far as may be practicable, without much inconvenience, we confine ourselves within it, and deviate as little as we can into the numerous arts to which those sciences afford principles.*⁹

5. The Foundation of Economics: Positive Facts, not Hypothetical Premises. The next question to be considered is whether the science of political economy may be more conveniently based on positive or on hypothetical principles. Mr. John Mill, who has contrib-

uted much to political economy, as he has, indeed, to every science which he has touched, maintains that it is based on hypothesis. As it is impossible to change Mr. Mill's language for the better, I shall extract the material parts of the passage in which he states and supports this opinion.

Political economy ⁵ (he says) is concerned with man solely as a being who desires to possess wealth, and who is capable of judging of the comparative efficacy of means for obtaining that end. It predicts only such of the phenomena of the social state as take place in consequence of the pursuit of wealth. It considers mankind as occupied solely in acquiring and consuming wealth, and aims at showing what is the course of action into which mankind, living in a state of society, would be impelled, if that motive, except in the degree in which it is checked by two perpetual counter-motives—aversion to labor, and desire of the present enjoyment of costly indulgencies—were absolutely ruler of all their actions. Under the influence of this desire, it shows mankind accumulating wealth, and employing wealth in the production of other wealth; sanctioning by mutual agreement the institution of property; establishing laws to prevent individuals from encroaching upon the property of others by force or fraud; adopting various contrivances for increasing the productiveness of their labor; settling the division of the produce by agreement, under the influence of competition (competition itself being governed by certain laws, which laws are therefore, the ultimate regulators of the division of the produce), and employing certain expedients, as money, credit, etc., to facilitate the distribution. *All these operations, though many of them are really the result of a plurality of motives, are considered by political economy as flowing solely from the desire of wealth.* The science then proceeds to investigate the laws which govern these several operations, under the supposition that man is a being who is determined, by the necessity of his nature, to prefer a greater proportion of wealth to a smaller in all cases, without any other exception than that constituted by the two counter-motives already specified.

Not that any political economist was ever so absurd as to suppose that mankind are really thus constituted, but because this is the mode in which science must necessarily proceed. When an effect depends upon a concurrence of causes, those causes must be studied one at a time, and their laws separately investigated, if we wish, through the causes, to obtain the power of either predicting or controlling the effect; since the law of the effect is compounded of the laws of all the causes which determine it. The law of the centripetal and that of the tangential force must have been known, before the motions of the earth and planets could be explained, or many of them predicted. The same is the case with the conduct of man in society. In order to judge how he will act

under the variety of desires and aversions which are concurrently operating upon him, we must know how he would act under the exclusive influence of each one in particular. There is, perhaps, no action of a man's life in which he is neither under the immediate nor under the remote influence of any impulse but the mere desire of wealth. With respect to those parts of human conduct of which wealth is not even the principal object, to these political economy does not pretend that its conclusions are applicable. But there are also certain departments of human affairs, in which the acquisition of wealth is the main and acknowledged end. It is only of these that political economy takes notice. The manner in which it necessarily proceeds is that of treating the main and acknowledged end as if it were the sole end; which, of all hypotheses equally simple, is the nearest to the truth. The political economist inquires, what are the actions which would be produced by this desire, if, within the departments in question, it were unimpeded by any other?

It reasons, and, as we contend, must necessarily reason, from assumptions, not from facts. It is built upon hypotheses strictly analogous to those which, under the name of definitions, are the foundation of the other abstract sciences. Geometry presupposes an arbitrary definition of a line, "that which has length but not breadth." Just in the same manner does political economy presuppose an arbitrary definition of man, as a being who invariably does that by which he may obtain the greatest amount of necessaries, conveniences, and luxuries, with the smallest quantity of labor and physical self-denial with which they can be obtained in the existing state of knowledge. It is true that this definition of man is not formally prefixed to any work on political economy, as the definition of a line is prefixed to Euclid's *Elements*; and in proportion as, by being so prefixed, it would be less in danger of being forgotten, we may see ground for regret that it is not done. It is proper that what is assumed in every particular case, should once for all be brought before the mind in its full extent, by being somewhere formally stated as a general maxim. Now, no one who is conversant with systematic treatises on political economy will question, that whenever a political economist has shown that by acting in a particular manner, a laborer may obviously obtain higher wages, a capitalist larger profits, or a landlord higher rent, he concludes, as a matter of course, that they will certainly act in that manner. Political economy, therefore, reasons from assumed premises—from premises which might be totally without foundation in fact, and which are not pretended to be universally in accordance with it. The conclusions of political economy consequently, like those of geometry, are only true, as the common phrase is, in the abstract; that is, they are only true under certain suppositions, in which none but general causes—causes common to the whole class of cases under consideration—are taken into account.* 10

Among the writers who appear to have taken this view of political economy, the most remarkable is Mr. Ricardo. His treatment of it, indeed, is more abstract than that proposed by Mr. Mill. He adds to Mr. Mill's hypothesis other assumptions equally arbitrary. And he draws all his illustrations not from real life, but from hypothetical cases. Out of these materials he has framed a theory as to the distribution of wealth, possessing almost mathematical precision.

But neither the reasoning of Mr. Mill nor the example of Mr. Ricardo induce me to treat political economy as a hypothetical science. I do not think it necessary, and, if unnecessary, I do not think it desirable. It appears to me that if we substitute for Mr. Mill's hypothesis that wealth and costly enjoyment are the *only* objects of human desire, the statement that they are universal and constant objects of desire, that they are desired by all men and at all times,—we shall have laid an equally firm foundation for our subsequent reasonings, and have put a truth in the place of an arbitrary assumption. We shall not, it is true, from the fact that by acting in a particular manner a laborer may obviously obtain higher wages, a capitalist larger profits, or a landlord higher rent, be able to infer the further fact that they will *certainly* act in that manner, but we shall be able to infer that they will do so in the absence of *disturbing* causes. And if we are able, as will frequently be the case, to state the cases in which those causes may be expected to exist, and the force with which they are likely to operate, we shall have removed all objections to the positive as opposed to the hypothetical treatment of the science.

I have said that the hypothetical treatment of the science if unnecessary is undesirable. It appears to me to be open to three great objections.

In the first place it is obviously unattractive. No one listens to an exposition of what might be the state of things under given but unreal conditions, with the same interest with which he hears a statement of what is actually taking place.

In the second place, a writer who starts from arbitrarily assumed premises is in danger of forgetting from time to time their unsubstantial foundation, and of arguing as if they were true. This has been the source of much error in Ricardo. He assumed the lands of every country to be of different degrees of fertility, and rent to be the value of the difference between the fertility of the best and of the worst land in cultivation. The remainder of the produce he divided into profit and wages. He assumed that wages naturally

amount to neither more nor less than the amount of commodities necessary to maintain the laborer and his family in health and strength. He assumed that in the progress of population and wealth worse and worse soils are constantly resorted to, and that agricultural labor, therefore, becomes less and less proportionally productive. And he inferred that the share of the produce of land taken by the landlord and by the laborer must constantly increase, and the share taken by the capitalist diminish.

This was a logical inference, and would consequently have been true in fact, if the assumed premises had been true. The fact is, however, that almost every one of them is false. It is not true that rent arises in consequence of the difference between the fertility of the different qualities of land in cultivation—it might exist if the whole territory of a country were of uniform quality. It is not true that the laborer always receives precisely the necessities, or even what custom leads him to consider as the necessities, of life. In civilized countries he almost always receives much more; in barbarous countries he sometimes obtains less. It is not true that as wealth and population advance agricultural labor becomes less and less proportionally productive. The corn now raised with the greatest labor in England is raised with less labor than that which was raised with the least labor 300 years ago, or than that which is now raised with the least labor in Poland. It is not true that the share of the produce taken by the capitalist is least in the richest countries. Those, on the contrary, are the countries in which its whole amount is generally greatest.

Mr. Ricardo, however, certainly was justified in reasoning from assumed premises, provided he was always aware and always kept in mind that they were assumed. This, however, he seems sometimes not to know, and sometimes to forget. Thus he states as an actual fact, that in an improving country the difficulty of obtaining raw produce constantly increases. He states as a real fact, that a tax on wages falls not on the laborer but on the capitalist. He affirms that tithes occasion a proportionate increase in the price of corn and a proportionate increase of wages, and therefore are a tax on the capitalist, not on the landlord—propositions, both of which depend on an assumed fixed amount of wages.

A third objection to reasoning on hypothesis is its liability to error, either from illogical inference or from the omission of some condition necessarily incident to the supposed case. When a writer takes his premises from observation or from consciousness, and

infers from them what he supposes to be real facts, if he have committed any grave error it generally leads him to some startling conclusion. He is thus warned of the probable existence of an unfounded premise or of an illogical inference, and, if he be wise, tries back until he has detected his mistake. But the strangeness of the results of an hypothesis gives no warning. We expect them to differ from what we observe; and lose, therefore, this incidental means of testing the correctness of our reasonings.⁶

My objection to hypothetical premises, when used as the foundation of the science, does not of course extend to hypothetical examples, used merely as illustrations. Such intellectual diagrams, on the contrary, not only make abstract reasonings more easily intelligible,—they often expose their errors. Conclusions, which appeared to be correct, while the vague terms of capital, labor, profit, or demand were used, are often found to be erroneous when an hypothetical example embodies these abstractions, and endeavors to show the moral and physical processes through which the supposed result would be obtained. The absence of such illustrations is one of the great defects of Adam Smith; though perhaps this very defect contributes to the popularity of his work. Such illustrations, however useful, always give an appearance of stiffness and pedantry. The careless reader neglects them; and the real student is annoyed at having to learn the *dramatis personæ* of an imaginary case. But if Adam Smith had used them, he would probably have avoided some errors, and have preserved his successors from many more. His example in this and in some other respects introduced a loose popular mode of treating political economy, which has mainly retarded its progress.*¹¹

CHAPTER II

POLITICAL ECONOMY AND THE ART OF GOVERNMENT

1. *The Treatment of Political Economy as an Art.* 2. *Advantages and Disadvantages of the Popular Method.* 3. *Common Sense and Economic Science.* 4. *The Past and Future of Political Economy.*

1. **The Treatment of Political Economy as an Art.** [In his *Essays on some Unsettled Questions of Political Economy*,] Mr. Mill [gives] some of the ordinary definitions of political economy—such as that it is “the science which teaches in what manner a nation may be made rich”—or that “it is to the state what domestic economy is to the family.”

To these definitions he objects that they confound the essentially distinct, though closely connected, ideas of *science* and *art*.

These two ideas (he adds) differ from one another as the understanding differs from the will, or as the indicative mood in grammar differs from the imperative. The one deals in facts, the other in precepts. Science is a collection of *truths*; art, a body of *rules*, or directions for conduct. The language of science is, This is, or This is not; This does, or does not happen. The language of art is, Do this; Avoid that. Science takes cognizance of a phenomenon, and endeavors to discover its law; art proposes to itself an end, and looks out for means to effect it.

Rules, therefore, for making a nation increase in wealth, are not a science, but they are the results of science. Political economy does not of itself instruct how to make a nation rich; but whoever would be qualified to judge of the means of making a nation rich, must first be a political economist.⁷

With all this I agree; but the exposition is, I think, defective in not stating the grounds for treating political economy rather as a science than as an art. There is no difficulty in allotting to it, when considered as an art, a definite field. It might be defined as “the art which points out the institutions and habits most conducive to the production and accumulation of wealth.” Or, if the teacher choose to take a wider view, as “the art which points out the institutions and habits most conducive to that production, accumula-

tion, and distribution of wealth which is most favorable to the happiness of mankind." And in fact, one or the other of these definitions has in general been adopted, expressly or impliedly, by those who have professed to treat of political economy.* ¹²

According to the law which I have already mentioned, as regulating the progress of knowledge, political economy, when (in the 17th century) it first attracted notice as a subject of separate study, was treated as an art. At that time, human happiness was considered as dependent chiefly on wealth, and wealth was supposed to consist of gold and silver. The object which the political economist proposed to himself and to his reader, was the accumulation within his own country of the utmost possible amount of the precious metals. The questions which now agitate society, as to the distribution of wealth, were unregarded. All that was aimed at, was its acquisition and retention in a metallic form.

As respects the countries possessing native deposits of the precious metals, the means of effecting this were supposed to be obvious and easy. They had only to promote the extraction of silver from mines, and that of gold from quartz or from auriferous sands, and to prohibit the exportation of either. This was the policy of Spain and Portugal. The countries not possessing a native supply, could obtain it only by what was called a favorable balance of trade, that is to say, by exporting to a value exceeding that of their imports, and receiving the difference in money. And the money so acquired, they were taught to retain, by prohibiting its exportation.

The prevailing opinion shows itself in the preamble of the 5 Rich. II, stat. 1, cap. 2, one among the many statutes and proclamations by which this prohibition was for centuries enforced.

For the great mischief which this realm suffereth, and long hath done, for that gold and silver are carried out of the realm, so that, in effect, there is none thereof left, which thing, if it should longer be suffered, would shortly be the destruction of the same realm, which God prohibit.

The statute proceeds to forbid such exportation on pain of forfeiture. The merchants, however, who were necessarily the first to test the effects of this prohibition, found it inconvenient. Some trades, particularly those with the East, could be carried on only by the constant exportation of gold or silver, and in all others it was occasionally useful. They did not venture to attack the theory that the prosperity of a country depends on its accumulation of money. Few of them, probably, doubted its truth. But they main-

tained that the means by which the legislature endeavored to promote this excellent result, in fact defeated it. "Allow us," they said, "to send out silver to Asia, and we will bring back silks and calicoes, not for our own consumption, which of course would be a loss, but to sell on the Continent for more silver than they cost, and we shall add annually to the national treasure."

This was assented to, and after more than four centuries of prohibition, the export of bullion was allowed by the 15 Car. II, cap. 17.

Forasmuch (says the act) as several considerable foreign trades cannot be conveniently driven without the species of money and bullion, and that it is found, by experience, that the species of money and bullion are carried in greatest abundance, as to a common market, to such places as give free liberty of exporting the same, *and the better to keep in and increase the current coins of this kingdom*, be it enacted, that it shall be lawful to export all sorts of foreign coin and bullion, first entering the same at the custom-house.

The art of political economy now became more complex. Its object, indeed, was a very simple one, merely to increase the current coin of the country; but this was to be effected, not by restraining every trade which carried out bullion, but only those which carried out more than they brought in. But how were such trades to be detected? A test was supposed to be supplied, by ascertaining whether their imports were intended for home consumption, or for reëxportation. In the former case, the trade, whether profitable or not to the merchant, was obviously mischievous to the country.

In the second case the trade, if profitable to the merchant, must also benefit the country, as it would receive more money than it sent out.

It is not (says Sir James Stewart ⁸) by the importation of foreign commodities, and by the exportation of gold and silver, that a nation becomes poor; it is by consuming those commodities when imported. The moment the consumption begins, the balance turns. Nations which trade to India by sending out gold and silver for a return of superfluities of a most consumable nature, the consumption of which they prohibit at home, do not spend their own specie, but that of their neighbors, who purchase the returns of it for their own consumption. Consequently a nation may become immensely rich by the constant exportation of specie and importation of consumable commodities. But she would do well to beware not to resemble the milliner who took it into her head to wear the fine laces which she used to make up for her customers. While

a favorable balance is preserved upon foreign trade, a nation grows richer daily; *and when one nation grows richer, others must be growing poorer.*

Sir James Stewart's work was published in 1767, and as he says that it was the work of eighteen years, it must have been written between that year and the year 1749. Though he calls political economy a science, he treats it as an art, and has the merit of having first given to it limits clearly separating it from the other moral and political arts.

Its object is (he says) to secure a certain fund of subsistence for all the inhabitants, to obviate every circumstance which may render it precarious, to provide everything necessary for supplying the wants of the society, and to employ the inhabitants in such a manner as naturally to create reciprocal relations and dependencies between them, so as to make their several interests lead them to supply one another with their reciprocal wants.⁹

This agrees with my first proposal, namely, to define political economy as "the art which points out the institutions and habits most conducive to the production and accumulation of wealth." As incidental to the art, he was forced to examine the science, and a considerable portion of his work consists of inquiries into the laws which regulate the production and distribution of wealth. The [above] extracts show that he did not escape the prevalent errors of his times. And these errors were so grave, as to render the practical portion of his treatise not merely useless for its intended purposes, but positively injurious. A legislator following his precepts, would waste the wealth of the richest country, and destroy the diligence of the most industrious. But the scientific part of the work, particularly the chapters on population, and on the influence of taxation on wages, contains truths of great importance, which were unknown to his contemporaries, and cannot be said to be generally recognized even now.*¹²

Among the contemporaries of Stewart were the French Economists, or as they have lately been called, the Physiocrats, forming the school founded by Quesnay. Their works contain treatises on political economy according to my second proposed definition, that is to say, "on the institutions and habits most conducive to that production, accumulation, and distribution of wealth which is most favorable to the happiness of mankind"; but they contain much more. Quesnay and his followers lived in a country subject to political institutions, of which many were mischievous, more were

imperfect, and all were unsettled. The principal defects of the existing system appeared to them to arise from ignorance of the laws which regulate the production and distribution of wealth. They had discovered that the real wealth of a country,—that is to say, the amount of the means possessed by its inhabitants for the obtaining pleasure and preventing pain,—was best promoted by allowing to every man, as far as possible, liberty to employ himself in the manner which he thought best, and by securing to him the enjoyment of the fruits of his industry, and of his providence. They believed themselves also to have discovered that agriculture is the original and principal source of all wealth, and is the only source of net revenue, that is to say, of a surplus beyond the expense which is the condition of all production. As the result of these principles, they proposed to substitute for the innumerable taxes on importation, on exportation, on transit, on production, on sale, on consumption, and on the person of man, which then formed the fiscal system of France, a single tax on the rent of land. So far their precepts were founded on political economy. But when they proposed the separation of legislative and judicial functions, and required the whole legislative power to reside in an absolute hereditary monarch, they drew their premises from other branches of political science.

From this remark, however, I must except Turgot; and it is remarkable that the only man among the disciples of Quesnay who was actually practicing political economy as an art, is the only one who treated its principles as a science. His *Réflexions sur la Formation et la Distribution des Richesses*, published in 1771, is a purely scientific treatise. It contains not a word of precept; and might have been written by an ascetic who believed wealth to be an evil.

Adam Smith, the founder of modern political economy, considered it as an art.

Political economy (he says in the introduction to the fourth book) proposes two distinct objects: first, to provide a plentiful revenue or subsistence for the people, or, more properly, to enable them to provide such a revenue or subsistence for themselves; and, secondly, to supply the state or commonwealth with a revenue sufficient for the public service. It proposes to enrich both the people and the sovereign.

The principal purpose of his work was to show the erroneousness of the means by which political economists had hitherto proposed to attain those two great objects. And in the existing state of knowl-

edge, this could be done only by proving that many of them mistook the nature of wealth, and all of them the laws according to which it is produced and distributed. The scientific portion of his work, therefore, is merely an introduction to that which is practical.

Of the five books into which the work is divided, it occupies only the first and second. The third is an historical sketch of the progress of opulence. The fourth, the longest of the whole work, considers the direct interferences by which governments have attempted to lead or force their subjects to become rich; and proposes to show that every system of preference or restraint retards instead of promoting its object. The fifth book, which points out the means by which the duties of the sovereign may best be performed, and the necessary public revenue provided, is in fact a treatise on the art of government. It treats of the subsidiary arts of war, of jurisprudence, and of education. It considers the advantages and disadvantages of religious endowments, and even the details of the opposed systems of patronage and popular election, and of equality and inequality of benefices. It also discusses at great length the modes and effects of taxation, and of public loans; and concludes by an elaborate plan for diminishing the taxation of Great Britain, by requiring all the British dependencies, of which Ireland and North America then formed part, to contribute directly to the imperial treasury.

I have often been tempted to wish that Adam Smith had published his fifth book as a separate treatise, with an appropriate title; though, no doubt, that course also would have had its disadvantages. It is by far the most amusing and the easiest portion of the *Wealth of Nations*, and must have attracted many readers whom the abstractions of the first and second books, if *they* had formed a separate work, would have repelled. On the other hand, the including by so great an authority in one treatise and under one name many subjects belonging to different arts, has certainly contributed to the indistinct views as to the nature and subjects of political economy which appear still to prevail.

The English writers who have succeeded Adam Smith have generally set out by defining political economy as a science, and proceeded to treat it as an art. Thus Mr. McCulloch states, as the proper subjects of political economy, "the laws which regulate the production, accumulation, distribution, and consumption of the articles or products possessing exchangeable value." Political economy, then, is a science. But he goes on to say that "the

object of political economy is to point out the means by which the industry of man may be rendered most productive of wealth, the circumstances most favorable to its accumulation, and the mode in which it may be most advantageously consumed." So defined, political economy is an art. Mr. Ricardo is, however, an exception. His great work is little less scientific than that of Turgot. His abstinence from precept, and even from illustrations drawn from known facts and transactions, is the more remarkable, as the subject of his treatise is distribution, the most practical branch of political economy, and taxation, the most practical branch of distribution.

The modern economists of France, Germany, Spain, Italy, and America, so far as I am acquainted with their works, all treat political economy as an art. Many of them, indeed, complain of what they call the abstractions of the English school; and others accuse it of narrow views and of an exclusive attention to wealth,—criticisms which must arise from an opinion that political economy is a branch of the art of government, and that its business is to influence the conduct of a statesman rather than to extend the knowledge of a philosopher.

It appears from this hasty sketch, that in assuming that political economy ought to be treated not as an art but as a science, Mr. Mill has assumed a proposition requiring proof, and opposed by a great weight of authority. Distinct, however, from the arts of which wealth is principally or exclusively the subject matter, it is necessarily the subject matter of a science. And I am not unwilling to give to that science the name of political economy. What I venture to object—or rather, for that word is too strong—to remark, in Mr. Mill's Essay, is, that he has assumed that in the absence of explanation, the words "political economy" properly signify that science. They may be so used, and I am inclined to think it better that they should be so used; but up to the present time the practice has been the other way. [In fact, Mr. Mill's own views seem to have been somewhat modified since the publication of his *Essays* in 1844.] In the *Essays*, political economy is a hypothetical science; in the *Principles*, [published four years later], it is a positive art.*¹⁴

Mr. Mill's *Principles* are an attempt to point out the institutions which are most favorable to the production and preservation of wealth, and to its distribution in the manner most conducive to the happiness of mankind. The premises made use of in so vast

an inquiry must be drawn from many different sciences. And in general, the teacher of an art does not attempt to teach the sciences on which it is founded. He assumes his scientific principles as established, and refers to them as well known. Many of the sciences and of the arts which are subservient to the art of political economy, as taught by Mr. Mill, are thus treated by him. He states, for instance, that protection from domestic or foreign violence, or fraud, is essential to any considerable production and accumulation of wealth. And he considers the means by which the expense of providing that protection may be best supported. But he does not inquire what are the necessary legal and military institutions. He leaves these to be pointed out by the arts of war and of civil and penal jurisprudence, and by the sciences on which those arts depend. And if the science, as distinguished from the art, of political economy were in an advanced state, if its outline were clearly made out, and generally recognized, its nomenclature fixed, and its principles generally made the subject of elementary instruction, it is probable that Mr. Mill would have treated it as he has treated the other sciences whose conclusions are adopted by him as premises. But it is scarcely necessary to state how far the science of political economy now is from the state in which its principals could be merely alluded to as well-known truths. It is scarcely necessary to state that we are still far from the boundary of what is to be known, and further still from any general agreement as to what is known. Mr. Mill, therefore, though writing on political economy principally as an art, is forced to prefix, or to interweave among his precepts, his own views of it as a science, and thus to add to the practical portion of his work, a scientific portion of considerable length.* ¹⁵

2. Advantages and Disadvantages of the Popular Method.

There is much in favor of the second definition, that which defines political economy as "the art which teaches what production, distribution, accumulation, and consumption of wealth is most conducive to the happiness of mankind, and what are the habits and institutions most favorable to that production, distribution, accumulation, and consumption."

It raises the political economist to a commanding eminence. The most extensive, though perhaps not the most important, portion of human nature, lies within his horizon. But the subject is too vast for a single treatise,¹⁰ or indeed for a single mind.* ¹⁶

As the possession of wealth is the great object of human desire, as

its production is the great object of human exertion, as the degree in which it is possessed and the modes in which it is distributed and consumed create the principal differences between nations, the art which teaches how all these things are to be done in the manner most conducive to human happiness is in fact the great art of government—an art which no man could treat in all its branches except in so elementary a form as to be uninteresting.*¹⁷ This will be evident if we consider the extent of one of its subordinate branches, the limits to be assigned to posthumous power.

On the death of a proprietor, ought his property to revert to the state, as it does in Turkey, or to go to his children, as it does in France, or to be subject to his disposition by deed or by will? If it be subjected to his disposition, ought he to have merely the power of appointing his immediate successors, or of entailing it for one generation, or for two, or forever? Is it advisable that he should have the power, not only of appointing a successor to his property, but of directing how that successor shall employ it? And ought such a power to be unlimited, or to be confined to certain purposes, or within a certain period? Ought the laws of succession and of testamentary power to be the same as respects land and movables, or to differ totally, or in any, or what, particulars? Ought these questions to be resolved differently in an old country and in a colony, in a monarchy, in an aristocracy, and in a republic? If political economy be a branch of the art of government, these inquiries form a branch, though a very small one, of political economy.

But there is scarcely any one of them which it would not require a long treatise to answer satisfactorily. How many, for instance, are the considerations which must be attended to in a discussion as to the propriety of enabling individuals to found permanent institutions for the purposes of religion, of education, and of charity, and as to the period for which they ought to be allowed to govern them from the grave?

It is almost impossible to overrate the importance of the art of government. With the exception, perhaps, of morality, it is the most useful of the mental arts; but, with no exception whatever, it is the most extensive. Too much attention cannot be given to it; but that attention should be subdivided. Too many minds cannot be employed on it, but each should select a single province; and the narrower the province, of course the more completely is it likely to be mastered.

The first definition, that which defines political economy as

“the art which teaches what are the institutions and habits most favorable to the production and accumulation of wealth,” is not liable to all these objections. It opens a field of inquiry, positively indeed wide, but comparatively narrow. The object proposed by the political economist is no longer human happiness, but the attainment of one of the means of human happiness, wealth.

To recur to the previous illustrations, he must, as in the former case, inquire whether, according to the principles of political economy, individuals ought to be enabled to direct how the property which they have acquired in life shall be employed after their deaths, in providing religious teaching, and to what extent, and for what periods, their posthumous legislation ought to be enforced; but he must stop far short of the point to which his inquiries, if he had adopted the former definition, would have extended. He must confine himself to the effect of such institutions on the production and accumulation of wealth. He has now no business to inquire whether endowments imply articles of faith, and articles of faith produce indifference or hypocrisy; whether the servility of a hierarchy be compensated by its loyalty, or the turbulence of sectarianism by its independence of thought. He has no longer to compare the moral and religious influence of an endowed, with that of an unendowed clergy. He does not inquire whether the morality of the one is likely to be ascetic, and that of the other latitudinarian; whether the one will have more influence over the bulk of the people, and the other over the educated classes; whether the one is likely to produce numerous contending sects, animated by zeal, but inflamed by intolerance, and the other an unreflecting apathetic conformity.

These are matters beyond his jurisdiction. But he assumes, on the general principles of human nature, that every civilized society requires teachers of religion, and that these teachers must be paid for their services.¹¹ He shows, on the principles of political economy, that in every such society there are revenues derived from land or from capital, which are consumed by a class not forced to take an active part in producing them, and enjoying therefore, a leisure which may be usefully employed or may be wasted in indolence or in frivolous occupation. He shows that to dedicate a portion of these revenues to the payment of the teachers of religion, is merely to substitute for a certain number of lay landlords, or lay fund holders, bound to the performance of no public duty, ecclesiastical fund holders, or ecclesiastical landlords, rendering, in return

for their incomes, services which, under what is called the voluntary system, must be purchased by those who require them. He shows that such a dedication must diminish the number of idle persons, and therefore increase the productive activity of the community and diminish the subjects of necessary expenditure, and therefore increase its disposable income; and he infers that the wealth of a society may be augmented by allowing such endowments to be created.

He may go on to show that such endowments may cease to be favorable to wealth, if the founder's legislative power be unlimited, since the doctrines of which he has ordered the dissemination may have been originally unpopular, or may become so as knowledge advances. The political economist, therefore, may recommend that all such institutions be subjected to the control of the legislature, in order to prevent endowments from being wasted by providing teachers for whom there are no congregations, and that they be also subjected to periodical revision, in order to accommodate the supply of instruction to the demand.

He may proceed to consider the different forms of endowments, by tithes, by land, by rent-charges, and by the investment of money. He may show how the first is an obstacle to all improvement, and the second to improvement by the landlord; how the third diminishes with the progress of wealth, and the fourth may perish with the fund on which it is secured. And he may propose remedies for these different inconveniences. If he go further than this, he wanders from the art of wealth into the art of government.

I have introduced this rather long illustration, not only as an example of the different modes in which the *art* of political economy must be treated, according to the definition with which the teacher sets out, but also as a specimen of the extent and variety of the details into which he must enter, even if he adopt the less extensive definition.

I have already said that political economy, treated according to the second definition, is a subject too vast for a single treatise, or even for a single mind. I am inclined to extend this remark to its treatment according to the first definition—at least with our present knowledge—and I propose, therefore, to take as my subject, not the art, but the much narrower province, the science; and to explain in the following work to the best of my ability, the general laws which regulate the production, accumulation, and distribution of wealth, leaving it to more adventurous writers to point out what are

the institutions most favorable to its production and accumulation, and to speculators of still wider views to say what production, accumulation, distribution, and consumption are most favorable to human happiness.

But though I follow substantially the example of Turgot and Ricardo, I do not propose to follow it implicitly. Though I profess to discuss only the *theory* of wealth, I do not refuse the right to consider its practical application. There is, indeed, something imposing and almost seductive in a work of pure science, especially if it be a science connected with human affairs. We admire the impartiality of the philosopher who discusses matters that agitate nations without mixing in the strife, or noticing the use that may be made of the truths which he scatters. And we admit, with comparative readiness, conclusions which do not appear to have been influenced by passion, the great disturber of observation and of reasoning.

This was one of the great causes of the popularity of Ricardo. He was the first English writer who produced political economy in a purely scientific form. He is usually a logical reasoner, so that his conclusions can seldom be denied if his premises are conceded, and his premises must usually be conceded, for they are usually hypothetical. Men were delighted to find what appeared to be firm footing, in a new and apparently unstable science, and readily gave their assent to theories which did not obviously lead to practice.

But though it be desirable that from time to time a writer should arise able and willing to treat the science in this severe and abstract manner, his treatise will be more serviceable to masters than to students. To those who are already familiar with the subject, to those who have already perceived how deeply mankind are interested in obtaining correct views as to the laws which regulate the production and distribution of wealth, a naked statement of those laws, though it should not possess the elegance of Turgot, or the originality of Ricardo, must still be useful, and even agreeable. A mere student would find it repulsive. He ought to be attracted to political economy by seeing from time to time its practical application. He should be taught that he is studying a science composed of principles which no statesman, no legislator, no magistrate, no member even of a board of guardians can safely disregard. And this will be best effected by putting before him examples of the good which has been done by adhering to those principles, and of the evil which has punished their neglect.

These examples, therefore, I shall think myself at liberty to give. I shall think myself justified, for instance, in showing how the natural distribution of wealth may be affected by the institution of poor laws. And I shall not confine myself to their effects upon wealth. I shall consider how far a well-framed poor law may promote the moral as well as the material welfare of the laboring classes, and an ill-administered poor law may produce moral, intellectual, and physical degradation. But these discussions must be considered as episodes. They form no part of the science which is my subject. I shall enter into them, not as a political economist, but as a statesman or a moralist; and I shall hope from my readers not the full conviction which follows scientific reasoning, but the qualified assent which is given to the precepts of an art.*¹⁸

3. Common Sense and Economic Science. There are many reasoners, or rather talkers and writers, who profess to be guided on all questions relating to [wealth], not by the theories of political economists, but by the opinions of practical men, or their own common sense.

By practical men are meant, I suppose, those who have had experience in the matters which political economy considers. But who has not had that experience? The revenue of all men must consist of rent, profit, or wages. They must all exchange it for commodities or services. They all know or have equally the means of knowing, for it can be discovered only by reflection, why they set a high value upon some things, a low one upon others, and disregard a third class.

It is in fact as impossible to avoid being a practical economist as to avoid being a practical logician. The man who, beside the daily traffic in which all are necessarily engaged, has devoted himself to any particular branch of trade or manufacture (and such is the general character of those who are called practical men), is much more likely to have his general views contracted than extended by it. He is apt to suppose that what he thinks useful and hurtful to himself, must be useful and hurtful to the community. Thus, the poor working clothiers of Strand attributed the public distress to the introduction of machinery in the manufacture of cloth; and Mr. Webb Hall calculated that a fall of ten shillings a quarter in the price of corn would be a loss to the whole country of £20,000,000 a year.

To those who profess to be guided solely by common sense, I

will quote, in the first place, Dr. Whately's admirable illustration of the nature of common sense, and of the absurdity of trusting to it where a better guide is to be found:

By common sense (says Dr. Whately) is meant, I apprehend, when the term is used with any distinct meaning, an exercise of the judgment unaided by any art or system of rules; such as we must necessarily employ in numberless cases of daily occurrence; in which having no established principles to guide us; no line of procedure, as it were, distinctly chalked out; we must needs act on the best extemporaneous conjectures we can form. He who is eminently skillful in doing this, is said to possess a superior degree of common sense. But that common sense is only our *second best* guide; that the rules of art, if judiciously framed, are always desirable when they can be obtained, is an assertion for the truth of which I may appeal to the testimony of mankind in general, which is so much the more valuable, inasmuch as it may be accounted the testimony of adversaries. For the generality have a strong predilection in favor of common sense, except in those points in which they, respectively, possess the knowledge of a system of rules; but in those points they deride any one who trusts to unaided common sense. A sailor, for example, will perhaps despise the pretensions of medical men, and prefer treating a disease by common sense; but he would ridicule the proposal of navigating a ship by common sense, without regard to the maxims of nautical art. A physician, again, will perhaps condemn systems of political economy, of logic, or metaphysics, and insist on the superior wisdom of trusting to common sense in such matters; but he would never approve of trusting to common sense in the treatment of diseases. Neither, again, would the architect recommend a reliance on common sense alone in building, nor the musician in music, to the neglect of those systems of rules which in their respective arts, have been deduced from scientific reasoning aided by experience. And the induction might be extended to every department of practice. Since therefore each gives the preference to unassisted common sense only in those cases where he himself has nothing else to trust to, and invariably resorts to the rules of art wherever he possesses the knowledge of them, it is plain that mankind universally bear their testimony, though unconsciously, and often unwillingly, to the preferableness of systematic knowledge to conjectural judgments.¹²

Dr. Whately's reasoning is unanswerable, but we shall be far too favorable to most of those who profess, and perhaps sincerely, to rely on common sense in matters of political economy, if we believe that they actually do so.

Political economy was an art long before it was a science; and neither those who first practiced it, nor their advisers were filled by

knowledge, honesty, or singleness of purpose, to desire right ends, or to employ proper means.

Those who first practiced it in modern Europe (and our maxims of political economy have no earlier origin), those who first endeavored to employ the powers of government in influencing the production, distribution, and consumption of wealth, were semi-barbarous sovereigns, considering their subjects not as a trust, but a property, and desirous only to turn that property to the best and readiest account.

Their advisers were landholders, merchants, and manufacturers, each anxious only for his own immediate gain, and caring little how the rest of society might be affected by the monopoly he extorted. From the mode in which these persons pursued what they thought their individual interests, aided by national jealousy and by the ambiguities of language, and unchecked by any sound principles, arose that unhappy compound of theoretic and practical error, the *Mercantile System*. [The reader is probably] acquainted with the outline of that system, and I must necessarily consider it somewhat at large in [a later chapter].¹³ I will say no more of it therefore in this place, than that it was founded in a belief that the wealth of a country consists solely of gold and silver, and is to be retained and increased by prohibiting the exportation of money, and by giving bounties on the exportation, and imposing restrictions on the importation of other commodities, in the hope of producing a trade in which, the imports being always of less value than the exports, the balance may be paid in money: a conduct, as wise as that of a tradesman who should part with his goods only for money; and instead of employing their price in paying his workmen's wages, or replacing his stock, should keep it forever in his till.

As is the case, however, with every long-standing abuse, so many persons are immediately interested in supporting particular parts of the system, and the theory on which it is founded so long commanded universal assent, that ninety-nine men out of a hundred imbibe it with their earliest education. Terms which imply the truth of the theory, and, consequently, the propriety of the practice, have even become a part of our language. A trade in which money is supposed to be received in exchange for goods is called a trade with a *favorable* balance; duties imposed to give monopolies to particular classes of producers, are called *protecting* duties; applications of the public revenue to divert capital and labor from their natural employment, are called *bounties*. The consequence of all

this is, that men who fancy they are applying common sense to questions of political economy, are often applying to them only common prejudice. Instead of opposing, as they fancy, experience to theory, they are opposing the theory of a barbarous age to the theory and experience of an enlightened one.

There never was a man of stronger common sense, a man more fitted to draw accurate conclusions from few or doubtful premises, than Napoleon. He had an utter horror of political economy; the principles of which, he said, if an empire were built of granite, would grind it to powder. On such subjects he trusted to common sense. And his common sense was an undistinguishing acceptance of the whole theory of the Mercantile System.

It appears from his conversations at St. Helena, that he fully believed that the Continent must be a loser by its commerce with England, and that it must be so on account of the excellence and cheapness of English commodities. These abominable qualities must, he thought, enable us, in the jargon of the theory, to undersell the Continent in its own market, and ultimately produce its ruin, through that unfavorable balance of trade, in which what is received is of greater value than what is given. He thought that he could put an end to this trade by his Continental System. Without doubt the principal object of that system was to ruin England; but he appears to have implicitly believed that it was also a blessing to the Continent. The murmurs of his subjects and allies he treated like the complaints of spoiled children, who do not know what is for their own good, and who, when experience has made them wiser, will embrace from choice what they have submitted to from necessity. There can be no doubt, I think, that these opinions, and the obstinacy into which they led him, were the ultimate causes of his downfall.

But can they be said to have been founded in common sense? If Napoleon had trusted to his own powerful sense, if he had not been misled by a theory as wild as it is generally received, could he have believed that the Continent was injured by enjoying an advantageous market, and was injured precisely in the proportion in which that market was advantageous?

[Limitation of space] prevents me from dwelling on the many other prejudices which profess to derive their sanction from the much-abused term *common sense*. I will only suggest, as instances, the common opinion that the unproductive consumption of opulent individuals and of governments, the mere waste of armies, and of

courts, is beneficial to the other members of society, because, to use the vague and unintelligible language of common conversation "it promotes the circulation of money";¹⁴ and the equally common error, that a fall in the price of subsistence, arising from its abundance, is injurious to the manufacturing classes, because it diminishes the market for their commodities. These opinions, setting aside their error, are so paradoxical, that I cannot conceive a man with a mind so constituted as to admit them unhesitatingly if they were presented to him when perfectly unbiased. But they are favorable to the interests, or to the supposed interests, of the most influential members of every community. They have been so long repeated, in so many shapes, and on so many occasions, that they have become "familiar in our ears as household words"; and there is not a more common mistake than to suppose that because a proposition is trite it must be true.*¹⁹

4. The Past and Future of Political Economy. Political Economy, as a separate branch of study, may be said to be about a century old. Many of the facts which are its subject matter, have indeed attracted human attention from the earliest times; many opinions, right or wrong, have been formed respecting them, and many customs and laws, beneficial or injurious, have been the consequence: but it was not until nearly the middle of the [18th] century, that any attempt was made to reduce those opinions into a system, or to ascertain the grounds on which they were founded, or even how far they were reconcilable with one another. To M. Quesnay belongs the honor of having first endeavored to explain of what wealth consists, by what means it is produced, increased, and diminished, and according to what laws distributed; in other words, of having been the first teacher of political economy. In the course of his investigations, he found that in the pursuit of wealth all governments had not merely mistaken the straight road, but had frequently pursued a path leading directly away from it. He found that instead of endeavoring to attain a beneficial end by appropriate measures, they had been aiming at a useless result by means totally ineffectual. Until his time it had been supposed that wealth consists of gold and silver, and that the quantity of gold and silver in any given country is to be increased by encouraging the exportation and discouraging the importation of all other commodities, and by the perpetual interference of governments in the modes in which the labor of their subjects is exerted, and the objects to which it is directed. Quesnay showed that gold and silver make the smallest

and least important portion of the wealth of a country. And he showed that the abundance of gold and silver, and of every other commodity, is to be promoted, not by restrictions on importation, nor by bounties on exportation, but by the absolute freedom of external and internal trade; by securing to every man the results of his industry or frugality, without attempting to order him what to produce or how to enjoy.

His inquiries seem to have produced on his own mind, and on the minds of his disciples, effects resembling those which would be created by the discovery of a map by a party who had been long wandering in an imperfectly known country. His map, indeed, was often inaccurate, but the points in which it was correct were the most important, and its errors, such as they were, were not detected by those to whom he offered it. Few men have ever presented to the human mind a more interesting subject of inquiry, and few have had a more devoted band of disciples. La Riviere, Mirabeau, Turgot, and the other writers forming the school called the French Economists, all implicitly adopted Quesnay's opinions, and engaged zealously in their propagation.

The inquiry which Quesnay originated was pursued, and with still greater success, by Adam Smith. Smith was superior to Quesnay, and perhaps to every writer since the times of Aristotle, in the extent and accuracy of his knowledge. He was, on the whole, as original a thinker as Quesnay, without being equally subject to the common defect of original thinkers, a tendency to push his favorite theories to extremes; and in the far greater freedom then allowed to industry in Great Britain than in France, and in the greater publicity with us of the government receipt and expenditure, he possessed far greater advantages as an observer. With these high qualifications and favorable opportunities, and assisted by a style unequalled in its attractiveness, he has almost completely superseded the labors of his predecessors. The few who read their writings, read them not in the hope of obtaining the instruction which they were intended to afford, but as sources of historical information, or as examples of the errors to which powerful minds may be subject in the infancy of a study.

From the appearance of the *Wealth of Nations*, political economy has excited a constantly increasing interest. All the events, fortunate and unfortunate, which have occurred in Europe during that extraordinary period, have tended both to increase its actual importance, and to occasion that importance to be better estimated.

The art to which it is principally applicable is the great art of government, and particularly that branch of government which consists in the raising and employment of public money. Not a tax can be imposed or applied without materially affecting the fortunes of those by whom it is paid, of those among whom it is expended, and of third persons, many of whom, perhaps, are unaware of its existence. To ascertain the character and the extent of these effects, even as to any existing tax, without the aid of the general principles supplied by political economy, is scarcely practicable; to foretell or even to conjecture, with probability, the effects of an untried tax, without such aid, is impossible. A government ignorant of the nature of wealth, or of the laws which regulate its production and distribution, resembles a surgeon who has not studied anatomy, or a judge unacquainted with law.

But, under the old system of Continental Europe, many things concurred to diminish the attention which the evil consequences of this ignorance might have been expected to attract. Each monarchy was considered the patrimony of its king, and its public revenue a portion of his income. All that he could get he spent or gave away; part of it went in wars for his honor, part was wasted in building and pageantry, and part was distributed among his courtiers. Public debts were few and small, and were the debts, not of the nation, but of the crown. The interest was not an additional burden on the people, but a deduction from the gratifications of the prince, and was reduced from time to time, either by depreciating the currency, or by the simple expedient of a refusal to pay. No right was recognized in the public to inquire into the amount of the royal revenue, the sources from which it was derived, or the purposes to which it was applied. These were the private affairs of the sovereign, which it was not decent or even safe to canvass.

All this was changed at once by the French Revolution. It was proclaimed in France, and admitted, or scarcely denied, on the rest of the Continent, that governments are made for nations, not nations for governments; and that the public revenue is the revenue, not of the government, but of the nation—not a property, but a trust—not a rent or a tribute, but the purchase-money of the labor necessary to perform for the public the services which individuals cannot perform themselves so cheaply, or so effectually, paid over to the government merely as an administrator, unlawfully employed if applied to any other purposes, and unlawfully demanded if more than necessary for those purposes.

Every man felt himself interested that the proportion of his income which he had to pay over to the state should be reduced, either by diminishing expenditure, or by varying the mode of assessment.

At the same time the wars in which Europe was involved for a quarter of a century, and the scale on which they were carried on, occasioned in almost every country an enormous increase of that proportion of the whole income of the people which is administered by the government. Almost every country created a national debt, and thus threw on its rulers the additional duty of collecting a revenue, to be applied, not for current expenses, but to repay those who had advanced the public expenditure of previous years. And not only were the people induced to interest themselves in public affairs, they were frequently called upon to act. In many countries the whole form of government was more than once demolished and reconstructed. Almost every nation, at some period, received, or was promised, representative institutions; everywhere the monarch, by appealing to the people, recognized the existence and the force of a national will.

In the British Islands self-government was no novelty, but many circumstances concurred to increase and diffuse the interest taken in public affairs. Among these circumstances the principal ones were the extension of the public expenditure, the alterations in the currency, and the effects of the poor laws. In no extensive empire recorded in history, has so large a portion of the annual produce of the land, labor, and capital of the people, been administered by the state. Every man felt himself to be a public debtor, and almost every man became, in some shape or other, a public creditor. At the same time the nominal value of money, the standard by which his claims and liabilities were measured, was subject to variations considerable in themselves, grossly exaggerated by one party, and absolutely denied by another, of which few could point out the immediate causes, and no one could foretell the probable extent. Meanwhile, the effects of the poor laws over the southern and south-eastern districts of England, became every day more apparent. It became obvious to the most unreflecting, that they were gradually altering the rights, both of property and of industry, the relations between the poor and the rich, the laborer and his employer, and the habits and feelings of the agricultural, and in many places of the town population.

All these causes, and many others which it would be tedious and almost impossible to enumerate, have given to the political sciences,

during the last sixty years, an interest which no study, except perhaps that of theology during the early progress of the Reformation, ever acquired. And this at a period when the extension of books and newspapers, and of the habits and means of discussion and communication, has been such as our most sanguine ancestors never anticipated.

Of all the branches of political knowledge, the most important, and the most applicable to the purposes of government, is that which considers the nature and the origin of wealth. It is true that the ultimate object of government, and indeed the ultimate object of every individual, is happiness. But we know that one of the means by which almost every man endeavors to increase his happiness, or, to use the common phrase, to better his condition, is by increasing his wealth. And to assist, or rather to protect him in doing this, is the great difficulty in government. All the fraud, and almost all the violence, for the prevention of which government is submitted to, arise from the attempts of mankind to deprive one another of the fruits of their respective industry and frugality. To counteract these attempts, a public revenue must be raised and expended; and neither of these operations can be well executed or well judged of by persons ignorant of political economy. It may be added, that the desire for unjust gain, which, among savages, produces robbery and theft, assumes, among civilized nations, the less palpable forms of monopoly, combination, and privilege: abuses which, when of long standing, it requires much knowledge of general principles to detect or expose, and which it is still more difficult to remedy without occasioning much immediate injury to individuals.

I think, therefore, that I may venture to say, that no study ever attracted, during an equal period, so much attention from so many minds as has been bestowed, during the last sixty years, on political economy. I do not mean that this attention was acknowledged, or even that all those who had been framing and repeating theories respecting the modes in which wealth is created, increased, or diminished, have been aware that they were political economists. But every country gentleman who has demanded protection to agriculture, every manufacturer who has deprecated free trade, every speculator who has called for paper currency, every one who has attacked, and almost every one who has defended, the measures of the minister for the time being, has drawn his principal arguments from political economy.

At the same time, the avowed writers on this subject have been more numerous than those on any other science or art. If we look at our principal reviews, we shall find that a large portion of each number is dedicated to it. In the United States of America there are newspapers exclusively devoted to it, and it has professors in almost every university.

Has then, I will ask,—and it was as an introduction to these questions that I have ventured on so long a preface,—has the progress of political economy been in proportion to the ardor with which it has been urged? If it has not been so, by what causes has its progress been retarded? and are they causes within our control?

To the first question, the answer must be, No. After so much and so long continued discussion, we might have hoped that its limits would have been accurately laid down, its terms defined, and its general principles admitted. It is unnecessary to prove formally that this is not the case. Every one is aware that political economy is in a state of imperfect development,—I will not say characteristic of infancy, but certainly very far from maturity. We seldom hear its principles made the subject of conversation, without perceiving that each interlocutor has his own theory as to the objects to which the inquiries of a political economist ought to be directed, and the mode in which they ought to be pursued. When we read the most eminent of the recent writers on the subject, we find them chiefly engaged in controversy. Instead of being able to use the works of his fellow laborers, every economist begins by demolition, and erects an edifice, resting perhaps, in a great measure, on the same foundations, but differing from all that has preceded it in form and arrangement.

Supposing it to be conceded that this is a correct representation of the actual situation of the study, I proceed to the more important questions, by what obstacles has its improvement been impeded, and are there any, and what means, by which they may be removed?

One of the principal causes which has prevented the progress of political economy from being adequate to the attention which has been bestowed on it, is inherent in its nature. I will not say unfortunately so, since it is at the same time the principal cause of the attention which it deserves, and of the attention which, in fact, it has received. I mean its direct influence on the welfare of mankind; and the effect on our reasonings of this disturbing cause, has been strikingly increased by the state of transition in which the institutions of almost all the civilized world have been struggling for the

last sixty years, and seem destined to struggle for an indefinite period.

If our laws had been of the unchangeable character which has been ascribed to those of the Medes and Persians, we might have investigated the nature and sources of wealth with the impartiality with which we study the motions of the heavenly bodies. No one would have felt himself interested in denying conclusions which would have been unsusceptible of practical application. That wealth consists, not of money, but of the things which money can purchase,—that it is not lessened by resorting to the cheapest market,—that it is not augmented by augmenting the nominal value of the tokens by which it is measured,—that it increases with the increasing productiveness of labor, and diminishes if more labor be required to produce a given result,—that the profits of commerce consist not in what is given, but in what is received, are propositions which might have been neglected as truisms, or alluded to as self-evident, but could scarcely have been made the subjects of eager controversy. Monopolies would never have been defended, if monopolists had been secure.

It is to the difference in this respect in the state of Europe, that I ascribe the difference in the degree of clamor which was raised against Adam Smith in England, and the earlier economists in France, and that which has been directed against their successors in both countries. The doctrines of Quesnay and Smith were as much opposed to existing abuses as those of Malthus or of Ricardo; but there did not appear to be the same chance of their application. While restriction and prohibition was the rule, and apparently the unalterable rule, political economists were forgiven for proclaiming the advantages of free trade. The theory was even admitted as long as the practice seemed at a distance. But these halcyon times are over: it is becoming every day more apparent, that whatever is generally believed to be expedient, will sooner or later be attempted; and that institutions are to be attacked and defended, not by force, but by argument,—not by mere clamor, or dogged refusal, but by convincing the public of the benefit or of the disadvantage of the proposed alteration.

Archbishop Whately has well remarked, that the demonstrations of Euclid would not have commanded universal assent, if they had been applicable to the pursuits and fortunes of individuals; and of all branches of human knowledge, political economy, from the complexity of its relations, and the vagueness of its nomenclature,

offers the easiest scope to a prejudiced or an uncandid reasoner. The great improvements that are taking place in our commercial and financial policy, will tend to diminish this obstacle to political science by removing the subjects of contest. And we may hope that its force will be still further diminished by the mere progress of the study, as its terms become better defined, and more and more of its principles are established and recognized. But it would be vain to hope that it ever will be got rid of, or that men will examine questions which come home to their business and bosoms, with the unbiased spirit which urges the astronomer or the mathematician.

Another cause which has rendered fruitless much of the attention bestowed on political economy, has been the frequent attempt to discuss insulated questions connected with it, by those who have not previously endeavored to acquaint themselves with its general outline. In some sciences this is, to a certain extent, practicable. In those which consist in a great measure of independent facts, such as law, or natural history, a single branch may sometimes be studied successfully. But in political economy the different propositions are so mutually dependent, that it is impossible to reason safely concerning any one without constantly bearing in mind all the others. And yet nothing is more common than to find persons writing books and making speeches, and even proposing legislative measures involving principles as to which the acutest and most diligent inquirer has not been able to make up his mind, not only without having settled within themselves the meaning of their principal terms, but even without being themselves aware that they are using words to which they attach no definite ideas.

The errors which I have mentioned have been committed principally by those who, without being professedly political economists, frequently indeed expressly disclaiming that character, have treated the subjects which political economy considers. But many who have avowedly devoted themselves to its pursuit, seem to have misdirected their efforts, for want of a clear conception of the object of their investigations, of the manner in which they ought to be conducted, or of the nature of the difficulties to be surmounted. If the teacher of political economy have not decided whether he is engaged on a science or on an art, whether it is his duty to explain phenomena or to deliver precepts, whether his principal business is to observe facts or to deduce inferences, whether his premises are all physical truths or depend partly on

arbitrary assumption,—his work, though it may contain partial views of the highest value, cannot form a clear or a consistent whole.

Nor is it sufficient that the writer should have made up his mind as to what he has to teach. It is important, though not equally important, that the student should have a general notion as to what he has to learn, as to the nature of the subjects which are to be laid before him, of the conclusions to which he will be asked to assent, and of the arguments by which they will be supported. The view that is to be taken, may perhaps not suit his habits of thought or of inquiry. It may be too abstract or too concrete. If he be accustomed to demonstration, he may be ill satisfied by proofs and illustrations drawn from actual life, and mixed with irrelevant accidents. If his pursuits have been practical, he may be disgusted by reasonings founded on hypotheses representing nothing that actually takes place. Or his objections may be directed rather against the subject itself than against the mode of its treatment. He may think that too much importance, or if not too much importance, too exclusive an attention, is directed towards wealth. He may wish that economists would consider man as a being with higher qualities, higher duties, and higher enjoyments than those which are concerned in the production, distribution, and consumption of commodities and services, and may regret to see him treated merely as a cause or a recipient of rents, profits, and wages. But if he be forewarned, he will not be disappointed, and, knowing beforehand the sort of study in which he is to be engaged, he will more easily perceive the premises and weigh the arguments of its professor.* ²⁰

CHAPTER III

CLASSIFICATION, NOMENCLATURE, AND DEFINITION

1. *Distinction between "Classification," "Nomenclature," and "Definition."* 2. *Ambiguities Incident to Economic Science. Illustrations: "Wealth," "Rent," "Profit," "Wages," "Landlords," "Farmers," "Laborers."* 3. *Requisites for Scientific Classification and Nomenclature.*

1. **Distinction between "Classification," "Nomenclature," and "Definition."** As a great part of what I have to say [in this treatise] will consist of the discussion of definitions, I think it advisable to [prefix] some remarks on their use and importance.* ²¹ It is to be observed that qualities are often ascribed to a definition which really belong not to the definition but to the classification or the nomenclature which it expresses. In his *Essay on Definitions in Political Economy*, Mr. Malthus lays down four rules,¹⁵ [as follows:]

1. That when we employ terms of daily occurrence we should define them so as to agree with the sense in which they are understood in ordinary use: this being the best authority for the meaning of words.

2. That where the sanction of this authority is not attainable on account of further distinctions being necessary, the next best authority is that of the most celebrated writers on the science.

3. That where a further alteration is necessary the alteration should be shown to be obviously useful—all change being an evil.

4. That the new definitions should be consistent with those allowed to remain, and the same terms always used in the same sense.

Now of these four rules the first three are rules not of definition, but of nomenclature. The first part of the fourth is a rule of classification, and the remainder of it is a rule of nomenclature. The only rule applicable to the art of defining is, that the definition comprehend all the particulars that it is meant to include and exclude all others. A definition therefore may be perfect, as a definition, though the objects denoted by the term defined be unskillfully grouped and though the term itself be unskillfully chosen. We

are apt, in such a case to complain of the definition, when the fault lies in the classification or in the nomenclature. For example, Mr. McCulloch's definition of capital as "that part of the produce of industry which can be made directly applicable to support human existence or facilitate production" appears to me objectionable: first, as including in one class things which for scientific purposes have no quality in common, such as the dinner on an alderman's table and a steam engine; and secondly, as excluding from the term capital many things always comprehended in that term in its ordinary acceptation and for which, while excluding them from capital, he has provided no other designation, such as the contents of a jeweler's shop. The first of these objections applies to Mr. McCulloch's classification, the second both to his classification and to his nomenclature; but neither of them affects his definition as a mere statement of his meaning.

If however the words *objection to a definition* are understood as a mere ellipsis implying, wherever it is necessary, objections to the classification on which the definition is founded, or to the name given to the class defined, it is not likely to mislead. And as the brevity of the expression makes it convenient I shall frequently use it.*²²

2. Ambiguities Incident to Economic Science. Illustrations: "Wealth," "Rent," "Profit," "Wages," "Landlords," "Farmers," "Laborers." The purpose of definition is to assist classification and nomenclature. Without these processes science could not exist. If we thought only of particulars we could not frame the general propositions of which science consists. If after having arranged the subjects of our thoughts in classes we were not to give names to those classes, we should be unable to recollect them ourselves or to suggest them to others. It is true that for these purposes definitions are not always necessary. There are sciences with an established classification and a recognized nomenclature. In many departments of chemistry a work addressed to chemists might be intelligible although not one of its terms were defined. But that is because they had been defined already, for an elementary work in which the technical words were undefined would be useless. It would be intelligible only to the proficient who would not want it. In the mental sciences no writer whether his work be a regular treatise, or an essay on a single subject, whether he addresses the student or the proficient, can rely on being understood unless he explains as he goes on the meaning of every technical term which

he employs. [This situation may be accounted for by the following peculiarities incident to almost all mental sciences:]

A. Classes not Rigidly Separated. The phenomena of mind are not separated from one another by the clear and permanent marks which enable us to distinguish the different phenomena of matter. In zoölogy the species are divided by barriers created by nature; and though the genera are artificial and may be changed by every philosopher who thinks that he can suggest a more convenient arrangement, they are never vague. We may think the zoölogist's classification ill constructed, but we always know what he means.

In mental science the different groups have always a tendency to melt into one another. Most economists have divided revenue into three species—*rent*, *profit*, and *wages*. At first sight this classification appears distinct; but when we come to apply it, many cases are found of a revenue which partakes so much of the qualities of each of the three species that it might, with equal, or nearly equal propriety, be assigned to any one. The revenue of a great painter is an example. It might plausibly be considered as the wages of his labor, or as profit on his accumulated capital of knowledge and skill, or in the nature of a rent produced by his extraordinary talents.

B. Words Used in Different Senses. The nomenclature of the physical sciences has been almost altogether invented by philosophers. There is seldom therefore any doubt as to the particulars which a general name is intended to denote. The nomenclature of the mental sciences is borrowed from ordinary language; and the general terms of ordinary language are usually formed by extending what was probably at the beginning the designation of an individual from one particular to another particular, and gradually from one group of particulars to another group, in consequence of some quality which the speaker thought that he perceived them to have in common. Thus *ἀρετή* first expressed mere general resemblance to the god of war, thence it came to signify courage—then any moral excellence. And Aristotle applies it to habits which certainly never were ascribed to "*Ἄρης*."

Sometimes the process is one not of extension but of restriction. Thus wealth originally meant well-being, or happiness. Then it was confined to the well-being arising from the possession of the external sources of comfort or enjoyment. Most of these are purchasable by money and to these it was in time restricted. As

men's attention became fixed not so much on the things purchased as on the money with which they were purchased, the meaning of the word wealth was further confined: it came to signify merely the command of money, and by his command of money a man's wealth was estimated. As respects the wealth of individuals, this meaning has not been altered. But when not individuals but nations were considered still narrower limits were imposed on the term wealth. It came to signify not the command of money, but the actual possession of money, and the wealth of a community was estimated by the amount of gold and silver circulating among its members.

It is difficult to say how much mischief this single ambiguity has occasioned. The happiness, it was said, of an individual depends mainly on his wealth. This was true, using the word wealth to signify the *command* of money, a power which may coexist, and generally does coexist, with a very small *possession* of money. A man who commands, and perhaps spends £20,000 a year often keeps in money only a few shillings, while his butler, with only £50 for his annual wages, has often £10 in his pocket. The happiness of a nation, it was added, consists of the aggregate happiness of the individuals composing it. It must depend therefore mainly on the wealth of the nation. This was true, if the word wealth had been used in its former sense, but was false when it was used to signify the possession of money. But this latter was, as I have before remarked, the sense in which it was used, and all the nations of Europe strove for centuries to increase their *possession* of money by means which constantly interfered with their *command* of money. They acted like a shopkeeper who should try to keep in his till all the cash received from his customers instead of employing it in supporting his family or in renewing his stock.

C. Common Terms Tinctured by Irrelevant Associations. The names used in the physical sciences, having been almost all invented for the purposes of those sciences, seldom imply qualities which do not necessarily belong to the species which they designate. The terms of political economy being derived from common use are often tinctured by irrelevant associations.

To illustrate by an instance, in England agriculture is generally managed by three classes of producers known as *landlords*, *farmers*, and *laborers*. The landlord is absolute master of the land subject to the qualified and limited interest which he may choose

to concede, or, to use the technical word, to let, to his tenant, and he generally erects the necessary buildings and makes the more expensive and permanent improvements. The farmer in his turn is master for the period of his tenancy, but is generally bound to treat the land in a predetermined manner and he must give up the possession the instant that his term has expired. It is his duty to provide all the movable live and dead stock, the wages of the laborers, and the rates and taxes, and to pay periodically to the landlord for the use of the land and buildings a net fixed sum.

The laborer is hired by the year, the week, the day or the job, provides nothing but his own person and clothes, and has no claim on the individual landlord or tenant except for his wages. He has, however, a general claim on the occupiers of the land constituting the parish in which he is settled for full support for himself and his family, if he is out of employment, or cannot earn wages sufficient to keep them in tolerable health.

These are the rights which we associate with the words landlords, farmers, and laborers. And when we find in other countries persons who appear to stand towards the land and towards one another in analogous relations we call them by the same names and fancy that these names imply similar rights and liabilities.

The first English conquerors of Bengal (says Mr. John Mill) carried with them the phrase *landed proprietor* or landlord into a country where the rights of individuals over the soil were extremely different in degree, and even in nature from those recognized in England. Applying the term with all its English associations in such a state of things, to one who had only a limited right they gave an absolute right, from another because he had not an absolute right they took away all right, drove whole classes of men to ruin and despair, filled the country with banditti, created a feeling that nothing was secure, and produced, with the best intentions, a disorganization of society which had not been produced in that country by the most ruthless of its barbarian invaders.¹⁶

With equal impropriety we transferred our English notions to Ireland. There are there persons called *landlords*, *farmers*, and *laborers*, but they resemble their English types in little but name. In Ireland the landlord has been accustomed to erect no buildings and make no improvement whatever. He is a mere recipient of rent. His tenants look to him for no services, and on the other hand he can exercise over them little control. It is very seldom that he prescribes to them any system of husbandry, or if he should

do so that he can safely enforce it. He cannot remove them if dissatisfied with their treatment of the land, still less can he do so for the purpose of throwing farms together and introducing the processes which require large capitals and large holdings. His only relation to them is that of creditor. With the laborers he has scarcely any relation whatever. If he have any demesne land in his own occupation he may of course employ them in cultivating it. But this is seldom the case. Farming by a gentleman is a trade still more unprofitable in Ireland than in England. And as the landlord does nothing for his tenants, of course, he cannot employ laborers on *their* lands.

Again, the Irish farmer is not like the Englishman a capitalist employing on a tract of perhaps three hundred acres, a capital of £3,000, maintaining 14 or 15 laboring families and paying £9 or £10 a week in wages. The Irish farmer occupies from 6 to 20 acres, the average extent of a substantial farm being perhaps 12. The farm buildings consist of hovels for the family, the horse, where there is one, the cow and the pigs: hovels built by the farmer or by his predecessor with stones and bog timber and roofed with turf. The value of these hovels, as a foundation for tenant right, with that of the live stock and seed and a few instruments of agriculture form the capital, which on a farm of a dozen acres may amount (exclusively of tenant right) to £20 or £30. "If I were on my oath," said one of the witnesses in the Irish Poor Law Inquiry, "I don't think there is any man with £10 in my town land: the loss of a cow or two or of £10 or the gain of £10 would either ruin a man or make a man rich that got it. It would make a gentleman of him in a manner" (1 Binns 57). The greater part of the labor required by his farm, so far as it is performed at all—for much that we should think requisite is neglected—is performed by the farmer himself or by his family. For he seldom ventures to take a farm or indeed can obtain one, which cannot be cultivated principally by the united labor of the father and mother, sons and daughters. If the family be small so is the holding.

The laborer again is not like the English laborer a mere cottager working on another man's land and for another man's benefit and dependent for subsistence on his wages, when in employment, and on his parish when unemployed. He is generally the occupier of a patch of land from one rood to four in extent, manured for him by the farmer on which he raises the potatoes that are to

feed his family. For this and for the site of his cabin, which he has probably built himself he pays a rent worked out in labor. Thus if the rent for the rood of potato ground be £2 a year, and that of the cabin £1, and his labor is estimated at 6*d.* a day, he works for the farmer 120 days. The rest of his time he gives to his own potato ground or to fairs or wakes, or to cowering over the fire; or, if he is active and enterprising, he comes over to assist in getting in the English harvest leaving his wife and children to beg during his absence. And if these resources are insufficient he turns beggar himself.

Now the classes known by the names of landlords, farmers, and laborers in England and in Ireland respectively must of course have some common attributes, or they would not have received a common name. But we have seen that they are separated by most important distinctions. And among these distinctions are many of their relations to one another, particularly those of the landlord to the laborer. In the agricultural districts of England that relation nearly approaches that of feudal lord and serf. The laborer is entitled to be maintained in the parish to which, under the settlement laws, he is said to belong. From that parish, therefore, he seldom ventures to move; and to that parish, if he do remove and require relief, he is sent back. He is therefore *ascriptus gleba*. He necessarily acquires or inherits some of the qualities of a serf, he is improvident and he is helpless. But he is neither idle nor indolent. He is not idle because he has never been accustomed to seek his pleasures in amusement in the beerhouse. He is not indolent because he has been always accustomed to associate labor with wages, to look at employment as the source of comfort, and want of employment as subjecting him to the insolence of the parochial authorities and to the *ennui* of the workhouse. To which it must be added that working under the eye of a master, or at piecework produces habits of unremitted industry which can not easily be acquired by the man who is his own taskmaster.

On the other hand, the responsibility of his support really falls on the landlord, for though the poor rates are paid in the first instance by the occupier they are of course eventually deducted from the landlord's rent. The landlord therefore has a strong interest in preventing the population of his parish from exceeding the number for whom there is profitable employment. And this interest is so obvious that where there are more proprietors in a parish than one they combine to effect it.¹⁷ The number of cottages is care-

fully kept down, persons not entitled to settlement in the parish, or as they are usually termed strangers, are kept out of it; or, if sometimes admitted when single are sent away as soon as they marry. The necessity of supporting all the settled laborers is a strong motive for employing them. And in fact they perform the whole agricultural work. To a considerable extent they are employed in the execution of the improvements which are effected in England by the landlords, but their principal employers are the farmers, whose time is spent in superintending their farms and disposing of the produce, not in following the plow or using the spade themselves.

Such were landlords, farmers, and laborers in England and Ireland respectively when the potato crop failed in both countries. The consequence in England was distress, but as the English like every civilized nation use many different kinds of food, and employ a large portion of their incomes for purposes other than the purchase of food, the difficulty was met by an increased consumption of other articles, which would otherwise have been given to domestic animals, by a large expenditure in the importation of food from abroad, and by a diminished expenditure in clothes and other commodities not absolutely indispensable.

In Ireland the consequence was famine—a calamity which cannot befall a civilized nation, for a civilized nation, as I remarked before, never confines itself to a single sort of food, and is insured therefore from great scarcity by the variety of its sources of supply. When such a calamity does befall an uncivilized isolated community things take their course: it produces great misery, great mortality, and in a few years the wound is closed and scarcely a scar remains.

This however was a conduct which it was impossible for the British Empire to adopt in 1847. The course which an uncivilized country must have taken—which must have been taken by Ireland if it had not formed a part of the United Kingdom—was not open to a country with the power and the responsibility of England. The English resolved that the Irish should not starve. We resolved that for one year at least we would feed them. But we came to a third resolution, inconsistent, I fear with the first, that we would not feed them for *more* than a year. How then were they to be fed in 1848 supposing their previous support, the potato, to fail again either by disease, or for want of cultivation?

The answer according to English notions seemed obvious—"Of

course, they must be supported by poor rates. Property has its duties as well as its rights. The first duty of the landlords is to employ and support the poor. Pass an act commanding the appointment of relieving officers throughout Ireland, commanding them to relieve all the destitute, commanding the guardians of every union to raise the necessary funds, and if they fail to do so commanding the Poor Law Commissioners to appoint paid officers in their stead with unlimited powers of taxation."

The opposers of the bill argued that the landlords of Ireland have not, like the English landlords, succeeded to their estates subject to the burden of supporting or employing the poor. That this is no more their duty than it is that of the tailors of Ireland, or of the druggists of Ireland. That they are not, like the English landlords, assisted in the performance of that duty by a strict law of settlement, by a firm administration of justice, or by the habits of five centuries. That as to employing the poor, it was out of their power, since they had scarcely any land in their own occupation, and could not interfere with that held by the farmers. That the rental of England was between 70 and 80 millions and that of Ireland about 15. That the poor in England were almost one million and in Ireland about three. And that the burden which one country bore with difficulty might crush the other within a very few years after it was imposed. The only answer that I ever heard to these arguments was, "The English landlords support their poor, therefore the Irish landlords must do so too." Forgetting, or rather not choosing to know that the class which we call landlords in Ireland differs from that which we call landlords in England, and differs precisely in the points in which, to enable a poor law to act safely, it ought to coincide.* ²³

3. Requisites for Scientific Classification and Nomenclature. To a certain degree these imperfections both of classification and of nomenclature are necessarily incident to the mental sciences. Their classification must generally be less ascertained than that of the material sciences, their genera and species must be distinguished by marks less certain and less obvious, their nomenclature must be less precise and is much more liable to misleading associations. But for this very reason it is the duty of the writer to apply most labor where there is most difficulty: to arrange the subjects which he has to consider in the groups in which they will be best comprehended and recollected; to assign to every group a separate name, and to explain carefully every name that can be misunderstood—in other

words, to be most careful in his classification, his nomenclature, and his definitions.* ²⁴

It is important to bear in mind that in the mental sciences questions of classification are mere questions of convenience. There are no individuals without some points of agreement, and consequently if we confine our attention to those points, there are no individuals, however generally dissimilar, which cannot be comprehended in the same class. But a classification to be useful must be one which facilitates the discovery or the remembrance of the principles of the science. To class men as phlegmatic, melancholic, bilious, and sanguine may be convenient to the nosologist. To divide them into landlords, capitalists, and laborers may be convenient to the political economist. But such principles of classification transferred from the one science to the other would be absurd. It is important too, not only that the principle of classification should be well chosen, but that the different classes should be separated by real differences. Thus the principle on which men are divided into landlords, capitalists, and laborers is the instrument of production which they respectively employ. But if it should appear that there is no real difference between land and capital, or, to speak more correctly, that land is a species of capital, it would follow that there is no real difference between landlords and capitalists and that landlords ought to be included among capitalists instead of being distinguished from them as a separate class.

Again it is important that the differences between different classes should not only be real, but should be capable of being ascertained. Mr. Ricardo and Mr. James Mill divide capital into fixed and circulating according as it is of rapid or of slow consumption. This difference is real and is important. The durability or perishableness of the capital employed influences materially the price of the commodity produced. But it is unfit to form a principle of classification, as it is a relative term and incapable of being ascertained. There is no line of demarcation between durable and perishable. As compared to a house a ship is perishable and therefore, according to this definition, circulating capital. As compared to a cargo of wheat it is durable, and a cargo of wheat is durable as compared to one of ice.

But though classification is a matter of convenience, the assigning particular individuals to a particular species, or a particular species to a particular genus, is a matter of fact, depending on the question whether the individual or species does or does not possess

the qualities which have been predicated of the species or genus. With such questions of fact however the political economist is seldom concerned. Most of the mental and material phenomena with which he has to deal are either notorious or readily admitted as soon as their existence is stated. From these he spins a series of deductions inferring, like those of the mathematician, an indefinite number of separate conclusions, but reposing all on a few truths obtained by observation or consciousness, and generally recognized even when they are heard for the first time, as a part of the hearer's previous knowledge.

The nomenclature of a science is perhaps as material as its classification. If there be important classes without names, their existence will often be forgotten or neglected. If names be used of which the extent is doubtful, or which imply qualities only partially belonging to the class which they designate, unsound reasoning may pass undetected and correct reasoning may be unconvincing.

The nomenclature of political economy, even in the writings of its best teachers is subject to all these defects. The first it owes mainly to its recency. Before a class of ideas acquires a name it must in general have been recognized by a succession of writers. The admirable nomenclature of the Schoolmen was the growth of ten centuries. It is to be hoped that before political economy has completed its second century we shall have some recognized name for the instrument of production employed by the laborer, another for the conduct of which profit is the reward, and another for the extra profit of which the rent of land is a species. At present these ideas are expressed by inconvenient periphrases.

The two other faults in the nomenclature of political economy arise from its having borrowed its general terms from ordinary language. The epithets *high* and *low* are currently applied to wages. Sometimes and most usually they mean the greater or smaller amount of *money* paid for a *day's labor*. Sometimes that paid for a given amount of *exertion*. Sometimes the greater or smaller amount not of money but of *commodities* earned by the laborer. Using the epithet *low*, in the first sense the wages of labor are low in the British West Indies for the laborer seldom earns more than a shilling a day. But as the exertion which he makes as a day's work is slight, and as the necessities and indeed the comforts and even the luxuries of life are very cheap his wages in the second and third meaning of the word, are high. In the first sense of the word the wages of the Irish laborer, at 8*d.* a day are lower

than those of the Lincolnshire laborer at 2s. a day but as the Lincolnshire man does more than three times as much work, his wages are lower by the *job* though higher by the *day*. The trenching which costs sixpence a perch in Ireland costs only 3d. a perch in England. Mr. Ricardo added to the perplexity by applying to the terms high and low wages a fourth sense, namely, the expression of the greater or smaller *share* obtained by the laborer of the produce of his labor. If one laborer employed for a day produced a commodity worth 13 pence, and received a shilling for his wages, and another in the same time produced a commodity selling for three shillings, and received two shillings for his wages, he called the wages of the first man, though only one shilling, more than six times as high as those of the second man, who received two shillings; since the first received twelve-thirteenths of the value of the produce of his labor, and the second only two-thirds.¹⁸

The use of words associated with ideas which only accidentally or partially belong to the class which they denote, may be called a species of ambiguity. An argument involving it, if syllogistically expressed, would have an undistributed medium.

Landlords (in England, if they have not granted leases) are absolute owners of their property.

Zemindars are landlords.

Therefore Zemindars who have not given leases are absolute owners of their property.

If the words *in England* are left out, the major is false; if they are left in, the middle term is undistributed, It is one of the most dangerous forms of ambiguity, as it is one unlikely to be suspected. We are apt to imagine that we understand accurately what is meant when a term familiar to us is used. And yet it is this very familiarity which misleads us. The term comes to us with all its associations, and we do not separate among the qualities which it suggests those which necessarily belong to the whole class which it denotes and those which accidentally belong to the specimens of that class with which we are acquainted.

To remedy this inconvenience by a new nomenclature is, in the present state of the science impracticable. Unless it were done by a general agreement among political economists every new work would be written in a new language. But such an agreement presupposes a uniform system of classification and there is no portion of the science on which there is more difference of opinion. To which it may be added that when we find a common name given to

things apparently dissimilar there is always a presumption, though perhaps a weak one, that this is to be accounted for by the existence between them of a real though obscure relation. If we abolish this common name by giving to each of the classes to which it was applied a separate designation we diminish the probability that the relation, if any, will be discovered. And lastly there is nothing of which the world is so intolerant as neology. It is disagreeable to begin a study by having to master a new set of *dramatis personæ*. It is still more disagreeable to have to unlearn old names and substitute for them a fresh set of signs. Most of Bentham's innovations were useful and appropriate. Some of them have been adopted; but they contributed perhaps more than any of his other faults of style to repel readers from the works into which they were introduced. They have operated too to prevent those who do read them from quoting him, for an extract including a new technical word is unintelligible.

I shall endeavor, therefore, as far as may be possible without sacrificing more important objects, to take my nomenclature from ordinary language, and to use words in their ordinary sense; but I shall always define them,—sometimes in order to show what I conceive their ordinary sense to be, and sometimes, when that meaning will not suit my classification in order to state what is the meaning which I affix to them.* ²⁵

NOTES ON PART I

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¹ [A keen critic has denied "that such a thing as truth for truth's sake is psychologically possible; or that any man, except an intellectual monstrosity, can actually limit his purpose purely to the acquisition of knowledge." His criticism, he adds, "holds far more evidently against the social sciences than against the natural ones. The subjects for investigation, the limits of information sought, and even the methods of work, are, in truth, despite every effort on the part of the investigator, immediately or mediately determined by the interest, the desires, the conditions of life and work of the investigator or those who ultimately direct and control his investigation." He concludes, therefore, "that the attempt to erect a pure science of economics, as Senior does, and as generations of theorists following him have done, is, in the nature of things, doomed to failure; and, further, that the belief that such a pure science is possible, and that the investigator has got hold of even a little bit of it, leads to erroneous practical conclusions, and, to say no worse, does not lead to correct theoretical results."

While admitting that scientific research has its limitations, yet one cannot help drawing a sharp distinction between *bona fide* scientists and mere propagandists or preachers. Though the serious-minded scientist seldom neglects the practical conclusion that may be legitimately drawn from his premises, he tries, as far as possible, to verify every bit of evidence submitted in support of such conclusion. The dogmatist or propagandist, on the other hand, emphasizes at all times his particular theory, without any regard to the evidence in the case; and in order to "get there" he will not hesitate to distort such data as are available or to invent new "facts" for his individual purpose. And, if he be cornered after all, his strategic retort will be simply, *Credo!* Cf. section 2 of the next chapter, especially the last two paragraphs; also Part VIII, Chapter II, section 1.]

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² ["The introduction into Ireland," Senior observed (Ln¹⁻⁴, 29-31), "of a compulsory provision for the destitute, was defended by an appeal to experience. We were told that the English poor have such a provision, and are the most industrious and the best maintained population in Europe. The Irish poor had no such provision, and are the idlest and the poorest people that is called civilized. If the presence of a poor law in the one and its absence in the other were the only difference in the history of the two countries, this would really be an instance of experience. If a country with a previous history precisely resembling that of England, possessing precisely the same physical and moral advantages, and differing solely in the absence of a poor law, were found to be idle and miserable, we might justly infer that the prosperity of England is owing to its poor law; for there would be no other cause to which it could be referred. And the misery of the other country could be referred to no cause except its want of a poor law. But when we find that the English and the Irish

nations differ in race, in religion, and in habits,—that the one is chiefly a town and the other almost exclusively a country population,—that the one consists principally of laborers for hire, the other of small tenants,—that the one lives on wages, the other on its own crop,—that the vice of the one is improvidence, that of the other indolence,—that in one country the religion of the people has been persecuted, in the other endowed,—that in the one the clergy of the people are the allies of the government, in the other its enemies,—that in the one public sympathy is with the supporter of order and peace, in the other with the disturber,—that the code which prevails in the one is that which is sanctioned by parliament and administered by courts of justice, in the other is one framed by conspirators, promulgated by threatening notices, and enforced by outrage and assassination,—that it is more dangerous to obey the law in the one than to violate it in the other,—when we find that these differences have lasted for centuries, and that, almost from our earliest knowledge of them, the circumstances in which the two countries have been placed have been not only dissimilar but opposed, it is obvious that the wretchedness of Ireland in the absence of a poor law does not prove that the presence of such an institution has been beneficial to England. All that was proved, was that a country can prosper with a poor law and be miserable without one. To that extent the experience of England and Ireland was decisive. It was a complete answer to any one who should maintain either that a country in which the population are forced to rely for subsistence on their own resources will necessarily be laborious, or that one in which the law protects every one, whatever be his conduct, from want, will necessarily be indolent. But it was no answer to those who maintained that such are the tendencies of the two opposite institutions, but that such tendencies may be neutralized by counteracting causes. And yet there were thousands of educated men who called such reasoning as this arguing from experience, and were anxious to make the experiment of an Irish poor law on the English model in reliance on what they called the experience of England.”

Compare Part I, Chap. III, sec. 2, subdivision C. Writing in 1861 (J⁴, Preface), Senior characterized the Irish Poor Law, which had been carried into effect in spite of his opposition as “the best which any country has ever adopted.”]

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³ [Despite abundant statistical data and other evidence respecting the shortcomings of the human will, all “good” people (including statisticians) are supposed to accept implicitly the theory that human beings—irrespective of age, sex, hereditary or environmental influences—are endowed with perfectly free wills, enabling them on all occasions to resist temptation and to choose that conduct which is best suited for their ultimate welfare. It is notorious that most of our creeds and dogmas respecting salvation, future rewards and punishments, are ultimately founded upon this antiquated psychological doctrine.

This theory regarding the absolute freedom of the will and its corollary that human beings are perfectly free moral agents are inconsistent with some of the most elementary facts respecting human nature, viz.:

1. That man is a social animal, and willy nilly he has to comply with the conventional rules adopted by society.

2. That the greater part of his conduct is the outgrowth of habits (*i.e.*, more or less fixed and automatic reactions to given stimuli) formed, under the influences of suggestion and imitation, during childhood and in the adolescent stages of life. Thus it has been ascertained that children raised in "friction" homes usually grow up into manhood and womanhood with mischievous traits, such as cruelty, selfishness, and insolence for which they can scarcely be held morally responsible.

3. That in the long run these very habits are profoundly changed by external conditions and circumstances—climatic, social, educational, economic, or political.

4. That the new habits or modifications of previous ones thus molded are in the course of time sanctified by tradition or precedents, hedged in and perpetuated by special institutions and customs.

Of course, no one ignores the influence of volition over human conduct. But the doctrine of *free will* fails to take cognizance of variations in the degree of will power possessed by given individuals at given times and under given conditions; and consequently it fails to recognize that human beings are subject to varying degrees of moral responsibility. According to this doctrine, man is absolute master over his destiny, and his power of choosing is unhampered by natural laws.

The practical application of this dogma has been to some people a source of encouragement and of hope; but to the generality of conscientious believers it has meant fear, despondency, and misery. It is indirectly an obstacle to social progress. The sooner we realize that the physical foundation of what is known as "mind," "soul," or "spirit" is susceptible to different stimuli under varying conditions and circumstances, the sooner will the community take active steps for the purpose of controlling effectively those conditions. *Cf.* Part X, note 51.]

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⁴[In one of Senior's letters to M. Quetelet, the great Belgian statistician, we find the following pertinent remarks:

"My time of late [1841] has been more occupied by legal, moral and political inquiries than by either statistical or political economy. I hope however to recur soon to the latter and it must bring with it the former—for *though I do not consider the truths of political economy as founded on statistical facts, yet its illustrations generally are.*" M⁶.]

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⁵*Essays on Some Unsettled Questions of Political Economy*, pp. 138, 139, 140, 144, 145.

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⁶["An illustration of this," Senior observes (Ln¹⁻⁴, 65-67), "may be found in the eminently ingenious and eminently erroneous work of Colonel Torrens, called *The Budget*. Colonel Torrens supposes the commercial world to consist of only two countries, equal in wealth and civilization, which he calls England and Cuba. He supposes that England has peculiar advantages for the production of woollens, and Cuba for that of sugar, and that the cloth of the one, and the sugar of the other, are freely exchanged in proportion to the labor which each has cost. He then supposes Cuba to impose a duty on English cloth, which would of course, to a certain extent, prevent its importation; and

he states that the consequence would be, that England would have to send money to Cuba for sugar, until the exportation of money had impoverished England, and its importation had enriched Cuba.

"Now if Colonel Torrens, instead of hypothetical, had taken real cases, if he had inquired, for instance, into the results of the prohibitive system of France, and had come to the conclusion that that system increases her wealth, the strangeness of such a result would have led him to suspect an error in his facts or in his reasoning. But the strangeness of the result of an imaginary case did not rouse his suspicion. The fact is, that his hypothetical argument is erroneous; and the error consists in his not having taken into account an element essentially incident to his supposed case, namely, the influence of commercial restrictions on the efficiency of labor. If he had taken this element into account, he would have found that Cuba, by her prohibitive system, would diminish the productive power of her labor, and consequently would find it her interest to import from England commodities which she previously produced at home; so that the ultimate result would probably be, rather an export of gold from Cuba than from England.

"Colonel Torrens's book always reminds me of the suit of clothes which the Laputa tailor cut on hypothetical data. Unfortunately, however, for the credit of the Laputa artist, Gulliver tried them on, and the error which had slipped into the calculation showed itself in every form of misfit. Happily for Colonel Torrens, and happily for ourselves, we have not tried on his theory." For a detailed discussion of this subject, see Part VIII, Chapter II, section 3.]

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⁷ *Essays [on Some Unsettled Questions of Political Economy]*, p. 124.

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⁸ *An Inquiry into the Principles of Political Economy*, Book II, ch. xxix, pp. 418, 419, and 422.

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⁹ Book I, Introduction.

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¹⁰ [In his *Introductory Lecture on Political Economy* (Lo¹, 11-12), delivered at Oxford in 1826, Senior defines political economy as "the science which teaches in what wealth consists, by what agents it is produced, and according to what laws it is distributed, and what are the institutions and customs by which production may be facilitated and distribution regulated, so as to give the largest possible amount of wealth to each individual." According to this definition, he states furthermore, "the science of political economy may be divided into two great branches, the theoretic and the practical." Commenting on this point in a letter to Count Arrivabene, under date of May 25, 1834, Senior says:

"With respect to the question which you ask, as to the distinction which I make between theoretic and practical branches of political economy, my answer is, that I believe in making that distinction I made a great mistake. On reconsideration, I am convinced that there is no practical branch, but all is theory, that practice belongs not to the science of political economy, but to the arts (such as government, commerce, etc.) to which that science is subservient." M⁸.]

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¹¹ [The author might have noted the exception of the Quakers, who, for more than three centuries, have demonstrated their ability to get along without the services of a paid priesthood.]

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¹² Preface to the *Elements of Logic*.

Page 34.

¹³ [Cf. Part VIII, Chap. II, sections 1 and 2.]

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¹⁴ [Cf. the views of Hudson Maxim referred to in the editor's article on "The Burdens of Preparedness and War," *Political Science Quarterly*, June, 1920, p. 280.]

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¹⁵ [*Definitions in Political Economy*], p. 4.

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¹⁶ Mill's *Logic*, Vol. II, p. 269.

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¹⁷ [See Part V, Chap. III.]

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¹⁸ [Cf. Part IX, Chap. I, sec. 3.]

PART II

HUMAN WANTS AND THE PURSUIT
OF WEALTH

CHAPTER I

THE PASSION FOR RICHES

1. The Motives for Money-making: Infinite Diversity of Human Desires. 2. Comparative Advantages of Wealth in Ancient and Modern Times. 3. The Perils of Poverty: Bad Housing as an Illustration.

1. The Motives for Money-making: Infinite Diversity of Human Desires. [As stated in a previous chapter,¹] I substitute for Mr. Mill's hypothesis, that wealth is the only object of human desire, what I believe to be a true proposition, namely, that it is an universal object of desire—that every man desires to obtain additional wealth with the least possible exertion of labor or of abstinence from immediate enjoyment;* ²⁶ [or, to express the idea more briefly], that *every man desires to obtain the utmost amount of wealth by the least amount of sacrifice.** ²⁷ By this statement I must not be supposed to mean that everybody, or indeed anybody, wishes for an indefinite quantity of everything. What I mean to state is, that no person feels his whole wants to be adequately supplied; that every one has some unsatisfied desires² which he believes that additional wealth would gratify.* ²⁸ The sources of this universal wish for wealth are nearly as numerous as the desires of mankind.* ²⁹ Some may wish for power, others for fame, and others for leisure. Some require bodily, others mental amusement. Some are anxious to produce important advantage to the public, and there are a few—perhaps there are none—who, if it could be done by a wish, would not benefit their acquaintances and friends.* ³⁰ To all these objects wealth is subservient.* ³¹ Its possessor may satisfy at will his ambition, or vanity, or indolence, his public spirit or his private benevolence; may multiply his means of obtaining bodily pleasure or of avoiding bodily discomfort, or the still more expensive amusements of the mind. Any one of these pursuits would exhaust the largest income; and as all men would engage in some of them, and many in all, the *desire for wealth must be insatiable*,³ though the modes in which different individuals would employ it are infinitely diversified.* ³²

An equal diversity exists in the amount and the kind of the sacrifices which different individuals, or even the same individuals at different ages, or under different circumstances, will make to obtain wealth.* ³³ a difference which forms one of the principal distinctions in individual and national character. Experience shows, and indeed it might have been predicted *a priori*, that the greatest and the longest-continued sacrifices are made in those countries in which property is most secure,⁴ and the road to social eminence is the most open. The inhabitants of Holland and of Great Britain, and of the countries that have derived their origin and institutions from Great Britain—the nations which up to the present time have best enjoyed security, have, up to the present time, been the most ardent and the most successful in the pursuit of opulence. But even the Indians of Mexico, though their indolence makes them submit to poverty, under which an Englishman would feel life a burden, would willingly be rich if it cost them no trouble.* ³⁴

The great antagonist principles to the acquisition of wealth are *indolence*, using that word to express the dislike of labor, and *idleness*, using that word to express the desire of amusement. Most men are to a certain degree under the influence of both these affections, but in some the one and in others the other is stronger. Some men are not averse to exertion, but find it difficult to resist the temptation to exert themselves in matters foreign from their regular occupations. They can do anything but their own business. These men are idle rather than indolent. Others of more torpid minds desire nothing so much as ease. They neglect their work not because they are diverted from it by other pursuits, but simply because they dislike it. They are rather indolent than idle.

The great antagonist principle to the preservation, and consequently to the accumulation of wealth is the desire of costly indulgencies, or, to use a shorter expression, of expenditure. But while indolence and idleness always act as obstacles to the acquisition of wealth, the desire of expenditure always acts as an incentive to its acquisition, and sometimes as an obstacle and sometimes as an incentive to its accumulation. Or, to speak more correctly, the desire for *immediate* expenditure is an incentive to acquisition and an obstacle to accumulation; the desire of *future* expenditure is an incentive to both. Though the desire of immediate gratification induces a man to spend, the desire to possess the means of future gratification induces him to save.

In uneducated persons the great motive both to acquisition and to expenditure is *appetite*. High wages will always tempt them to the most laborious, the most dangerous and the most unwholesome employments. The dry grinders of Sheffield work at a business in which no man preserves his health after he is twenty-five or his life after he is thirty-five. The steel dust from the stone is specific poison to the lungs. A magnetic mask has been offered to the grinders, which would in a great measure obviate this mischief. But they refuse to use it, under a fear that if their business were more healthy it would be worse paid. The high wages which are the price of health and life they waste as they receive them in intemperance. The desire of sensual enjoyment is the source of their industry and of their extravagance.

Among the educated classes *vanity* supplies the place of appetite as a motive both to exertion and to expenditure. *The desire of distinction* if we consider its universality and its constancy, that it affects all men and at all times, that it comes with us from the cradle and never leaves us till we sink into the grave, may be pronounced to be *the most powerful of human passions*.

The most obvious source of distinction is the possession of superior wealth.⁵ It is the one which excites most the admiration of the mass of mankind, and often is the only one which they feel capable of attaining. To seem more rich, or, to use a common expression, to keep up a better appearance than those within their own sphere of comparison, is, with the great majority of those who are placed beyond the fear of actual want, the ruling principle of conduct. For this object they undergo toil into which no slave could be lashed or bribed. Under the influence of this motive we see them sometimes wasting in a year or in a month fortunes for want of which they will be miserable for life, and sometimes foregoing the present gratification of every desire in order more fully to satisfy this want at a future time. It is the parent both of spendthrifts and of misers. It induces the young and the middle-aged, when the passion for ostentation is strongest, to live in apparent poverty in order to accumulate the means of future display, and even the aged to exercise self-denial for a future which they are not to see.

Many men live poor in order to die rich. Among our irrational wishes that for posthumous wealth is at least as common and as strong as the desire of posthumous fame. I knew a man whose income towards the end of his life, was £3,000 a year, and had been above £2,000 for many years. He then lived, and indeed he had

always lived, with the utmost penuriousness. He inhabited a garret, and seldom allowed himself a fire. During the session he used to stuff his pockets with bread and cheese and dine on them in the lobby of the old House of Commons,⁶ because there he could be warmed for nothing. Yet he scarcely left money enough to bury him. From the time that he became his own master he had laid out in annuities on his own life all that he could scrape together, and he died just after he had made an investment. He began probably with the intention of enjoying at some future period the expenditure of a large income, but when the income had been amassed the habit of saving and investing had become inveterate; and the wealth, which was to have been a means was treated by him as an end.

Among my early friends was a man of great intelligence and energy who, beginning with a capital of £5, by the age of fifty had accumulated more than a million, which, employed as he knew how to employ it, produced to him more than £100,000 a year. His personal expenditure did not exceed £15,000; so that it rapidly accumulated. He once said to me that he had much more money than he wanted for himself, much more than was good for his children, and that he certainly should leave off business if it were not so very profitable.

Instead of calling the pursuit of wealth which its accumulator is never to enjoy irrational, I ought to call it instinctive. The desire of wealth for its own sake seems to be implanted in us by nature as a counterbalance to the strong propensities to indolence and to expenditure which, if they were opposed by mere reason, would keep mankind poor. It is, of course, weakest in the countries in which life and property are least secure. In ill-governed countries wealth is danger. It is dangerous to show it, dangerous to keep it in your own custody, still more dangerous to place it in that of any other person.

When traveling in Greece in 1857, I was shown in the little village of Cassia, near Athens, a girl who was described to me as rich. Her fortune was on her head, in the form of gold coins fastened to her cap—a most inconvenient head-dress—and, if the town had been attacked by brigands, as on the day⁷ that I was at Cassia. Megara (a few miles off) was—a dangerous one; but it seems that she thought it the least insecure form of investment.*³⁵

It was in the insecure time of the middle ages that the term “miser” was applied to a man who obeys the instinct, as distinguished from the rational motives, to accumulation. Such a man,

in those times, probably *was* miserable. He purchased, by the sacrifice of present enjoyment, only anxiety and danger. But in well-governed countries wealth is safety. A rich man can protect his life, his property, his health, and his reputation far more effectually than a poor man can. He may exhibit it ostentatiously, he may employ it in any way that suits his tastes or his interests; he may intrust it to the management of others, sure that the arm of the magistrate, always lifted up, will protect it. In such a country, I believe, that accumulation—whether rational or irrational, whether for the purpose of future usefulness, or future enjoyment, or merely for its own sake—is one of the greatest sources of happiness. It is the only pursuit in which almost all men can engage. Power or fame can be acquired by very few—in England not by one man in 20,000. Every one who has more than the barest necessities of life can save. The delights of ambition and even of vanity wear out. Avarice is insatiable. Its pleasures never pall. It is to the desire of accumulation that the improvement, even the welfare of mankind is confided. If mankind had never possessed it, the human species would have become extinct, or would have fallen into the lowest state of barbarism. If they were now to lose it, they would rapidly degenerate into savages. And it will be found that in proportion to its force in any nation is generally the increase in wealth and in power of that nation.

Among the members of the same community the great accumulators of wealth are the middle classes.⁸ The poor are kept poor by the indulgence of their appetites. The rich can seldom withstand the immediate seduction of vanity. The day laborer and the great landlord are almost always in debt. The middle classes are generally above the temptation of appetite and even when they yield to it do so at little comparative expense. Vanity leads them rather to save than to spend. They can show their wealth by the magnitude of their concerns and by the firmness of their credit. Ostentation would rather lower than raise them in the estimation of the class whose opinion they value. They go on producing and amassing and leave the task of expending to their heirs.* ³⁶

2. Comparative Advantages of Wealth in Ancient and Modern Times. Among the Greeks and Romans none of whom ever saw a tolerable government, the dangers of wealth were enormous. No rich man could be certain that the tyrant, whether he called himself *Demos*, or *Turannos*, or *Populus* or *Princeps*, was not seeking to destroy his reputation and perhaps his life, not from personal

dislike, but merely as a means of confiscation. Even a rich nation partook of the general insecurity. In modern warfare wealth is strength. In ancient Greece and Asia and Italy it tempted the spoiler without giving the means of repelling him. It increased the slave population of which little use could be made in war, and consequently diminished the freemen who were the main defense of the state. "One of these days," said Solon to Cræsus, "a man with more iron will seize all this gold." As soon as Sparta became rich she dwindled away. "In consequence of the decrease of her free population," says Aristotle, "a single blow laid her prostrate."⁹ Though her territory could have maintained a cavalry of 1,500 men and 30,000 infantry, she could not in his time bring into the field more than a thousand soldiers. The poverty of Rome was more than a match for the wealth of Etruria.

It is to this feeling of insecurity¹⁰ that we owe the classical declamations against riches. These declamations do not appear, indeed, to have had much influence. Those to whom they were addressed seem to have been at least as eager for wealth as we are. Oppressive usury, legacy hunting, slave jobbing and many other modes of acquiring wealth which are intrinsically base, were frequent among their most distinguished men. Personal corruption was the reproach which public men most readily cast on one another. It served with them as the reproach of party spirit does with us. It was an imputation so probable that it could be flung out almost at random. Theoretically they despised wealth, practically they worshiped it.

Perhaps the country and the time during which wealth has been most desirable was England during the reigns of the Georges. Not only were the rich protected from foreign and internal violence, not only were they secure against extortion by the government, they did not even bear their proportionate share of the public expenses. The excise and customs, the principal sources of the revenue, pressed most heavily on the commodities consumed by the poor. A land tax indeed was imposed on what was then the wealthiest class, but in order to indemnify them the price of corn was raised during the first half of the period by a bounty on exportation, and during the remainder by restrictions on importation. Money could buy advancement in the army, in the church, and in the state. A great merchant, an opulent banker or the owner of an Indian Jaghire could purchase boroughs, and enter the House of Commons with a tail.

I recollect the time when a rich country attorney, who could not even guess where or from whom he was born sat for one borough and returned five other members. If he had lived only ten years earlier he must have died a peer. He was treading the road which seemed infallibly to lead to the House of Lords.

While power and honors were thus showered on wealth, little was done to mitigate the evils of poverty. The only serious attempt that was made, the poor law, aggravated the distress which it intended to alleviate. It produced a degraded population uniting the indolence and improvidence of slavery to the extravagance and insubordination of freedom. Criminal justice was administered, because without it society would fall to pieces, but civil justice was reserved as the luxury of the rich. The persons of the poor were protected from violence but the expense of legal proceedings excluded them from redress against fraud. There never perhaps was a time when it was better to be rich or worse to be poor.

With the accession of William the 4th began a change which is still in progress. The suppression of nomination boroughs shut against mere wealth the direct avenue to political power. The man with £20,000 a year can no longer say to his attorney, "Find me half a dozen seats. I will hire them at the expense of half my income, and have a party of my own." Wealth no longer enjoys a comparative lightness of taxation. That advantage has been transferred to poverty. An income tax has been imposed from which all whose incomes are under £150 a year, that is, more than nine-tenths of the community, are exempted. The wealthier minority are held up as the subjects of exclusive taxation: a principle, which if it be carried out—and I see no limits to it except the arbitrary will of the legislator—may convert them into what they were under the Greek republics, mere trustees for the state.

While we have been thus removing or diminishing the privileges of wealth, we have been endeavoring to alleviate the inconveniences of poverty.¹¹ The government has begun, as yet indeed timidly and inefficiently, to diffuse a better education. It has exerted itself more boldly and successfully to destroy that education in evil which was profusely scattered by the Poor Law rule as it existed during the first thirty years of [the 19th] century. It has provided a cheap and local administration of civil justice. It has exempted from taxation nearly all the necessities of life. It is beginning to take measures for the improvement of the habitations of the laboring classes. It is beginning to provide them with open spaces for

recreation, and to open to their views galleries of art and palaces. It has forced the railway companies to provide for them cheap and rapid means of transport. It has attempted—whether always wisely or not is a different question—to protect certain classes among them from voluntary labor which it thinks unfit for their age or sex.

Much without doubt remains to be done, and perhaps something to be undone, and the greater part of what has been done is mere seed in the ground, to be reaped by the next or by a still more distant generation. But even already the interval as respects happiness, which [not many decades ago] separated in England the rich from the poor has been narrowed. And all who believe in the improvement of mankind must believe that it will be still further narrowed—not, I trust, by pushing back the former but by advancing the latter. That it should ever be altogether removed is not to be expected or to be wished.*³⁷

3. The Perils of Poverty: Bad Housing as an Illustration. When he had gone through the splendors of Wentworth, Dr. Johnson's remark was "After all, this excludes only one evil, poverty." "But how much good does it let in?", answered Mrs. Boswell. This answer has been admired. A more correct answer could have been, that poverty is a general term not necessarily involving, but, when used in its largest sense, including almost every evil to which humanity is subject. As an illustration of this I will show with some detail the nature of only one of the different classes of evils produced by poverty. The class which I select consists of those produced by bad habitation.

Habitation differs from the other elements constituting the condition of a people in the extent of the interval between the worst habitation in which life can be supported, and that which is most conducive to health and morality. As respects food and clothing, the interval between the provision which is sufficient for all the purposes of health and decency, and that which will not maintain existence is not great. Eight shillings a week devoted solely to food and clothing, would, at our average prices, afford all that a laboring family, consisting of four persons, require for decency and health. It is more, indeed, than most laboring families in the south of England can employ for these purposes. But on one-third of that sum, or 2s. 8d. a week, they would perish. The difference between what is ample, and what is obviously insufficient, is not more than in the proportion of 3 to 1. But it is difficult to assign

any limits to the extent and excellence of habitation which are conducive simply to health. A house is wholesome in nearly the same proportion in which it is well drained, and well built, and its apartments are large. Where there are children of both sexes, mere decency requires four rooms—three for sleeping, and one for daily use. Four well built, well drained, well ventilated apartments (and to be well ventilated they must be large), are therefore the least that are sufficient to afford to an average family the house-room necessary for decency, and sufficient to give them the best means of health; and if they are to have any sitting room besides their kitchen there must be five.

On the other hand, there appears to be scarcely any badness of habitation in which life cannot be endured. That a whole family should occupy one small room by day and by night is miserable. But there are whole districts in which a family occupies not one room, but one corner of a room. Such is the result of the evidence, taken by Mr. Lewis, in his inquiry as to the state of the Irish poor in England, with respect to the worst portions of Birmingham, and Manchester. "I once searched," says Mr. Walther, of Birmingham, "all the Irish lodging-houses in Birmingham. In several houses 12 or 14 were sleeping in a small room, not 13 feet square. They sleep four, five, or six in a bed." "Many families," says Dr. Kay, speaking of Manchester, "often herd together in one small habitation. In these latter houses one room frequently contains all the inhabitants at night without distinction of age or sex, and often in one or two beds. In some cellars I have known 18 people, adults and children, sleep in one room, about four yards square, without window or other means of ventilation, excepting through the door, which opened into an adjoining apartment."¹²

Out of 175,000 persons, the estimated working population of Liverpool in 1840 when the House of Commons Committee on the Health of Towns took their evidence, 124,600 lived in courts or cellars; 86,400 being the estimated population of the courts and 38,000 that of the cellars. The courts consist of ranges of houses built back to back with an interval of from 15 to 9 or even only 6 feet between their fronts, absolutely closed at one end, and accessible at the other only by a covered passage, generally about 3 feet wide. One of these courts, 45 feet by 10, is mentioned as containing 8 houses, with three rooms in each, and 118 inhabitants; one room, 10 feet square, sometimes containing four families. But the cellars are a step lower in wretchedness; their average dimensions

are 12 feet by 10; their average population five inmates, or, according to another computation, four and three-quarters, to one cellar. They have, in general, no floor; very frequently there is no window, and the top of the door is on a level with the street, so that there is neither light nor air. And in these cellars and these courts resided 124,000 persons in a single town, that is, more than two-thirds of the laboring population of that town.

It may be supposed that Liverpool is an extreme case; but its state appears to be decidedly better than that of Glasgow, and in fact, on a par with that of most of our rapidly increasing manufacturing towns. It is little worse than parts of London described by the same report. "It is no uncommon thing," says Mr. White, a medical officer of the Holborn Union,¹³ "to find 5 or 6 families in a small room. I have seen a donkey in the same room."

The Reports of the Registrar-General¹⁴ show a variation of the annual mortality¹⁵ in different districts of the metropolis amounting to 100 per cent—a difference nearly equal to that which exists between the most healthy and the least healthy portions of the world.

The following extracts from Dr. Southwood Smith's Report on Bethnal Green and Whitechapel, show both the causes and the intensity of the evil.

1. It appears (says Dr. Southwood Smith) that in many parts of Bethnal Green and Whitechapel, fever of a malignant and fatal character is always more or less prevalent. In some streets it has recently prevailed in almost every house; in some courts in every house; and in some few instances in every room in every house. Cases are recorded in which every member of a family has been attacked in succession, of whom in every such case several have died; some whole families have been swept away. Instances are detailed in which there have been found in one small room six persons lying ill of fever together; I have myself seen this, four in one bed, and two in another. When fever once breaks out and becomes prevalent, under circumstances such as these, the poison acquires a virulence which not only proves unusually mortal to the persons immediately attacked, and to those who attend on the sick, but the evil is frightfully increased by the extension of the infection to neighboring houses and districts. The exhalations given off from the living bodies of those who are affected with fever, especially when such exhalations are pent up in a close and confined apartment, constitute by far the most potent poison derived from an animal origin. The room of a fever patient in a small and heated apartment in London, with no perfusion of fresh air, is perfectly analogous to a standing pool in Ethiopia

full of bodies of dead locusts. The poison generated in both cases is the same; the difference is merely in the degree of its potency. Nature with her burning sun, her stifled and pent up wind, her stagnant and teeming marsh, manufactures plague on a large and fearful scale. Poverty in her hut, covered with her rags, surrounded with her filth, striving with all her might to keep out the pure air and to increase the heat, imitates nature but too successfully; the process and the product are the same; the only difference is in the magnitude of the result.

But the magnitude of the result in London, if that magnitude be estimated by the numbers attacked, is not slight. From returns received from Bethnal Green and Whitechapel Unions it appears that during [1838] there occurred of fever cases—

In the Bethnal Green Union.....	2,084
In the Whitechapel Union.....	<u>2,557</u>
Total.....	4,641

Thus it appears that the medical officers attached to these two Unions alone have attended no less than 4,641 fever cases. But these returns include only the persons attacked with fever who applied to the parish for relief. Fever, it is notorious, has prevailed extensively in both these districts among people above the rank of paupers, among the people of the middle class, and in numerous instances, even in the families of the wealthy.

2. It appears that the streets, courts, alleys, and houses in which fever first breaks out, and in which it becomes most prevalent and fatal, are invariably those in the immediate neighborhood of uncovered sewers, stagnant ditches and ponds, gutters always full of putrefying matter, the soil of which lies openly exposed, and is seldom or never removed. It is not possible for any language to convey an adequate conception of the poisonous condition in which large portions of both these districts always remain, winter and summer, in dry and in rainy seasons, from the masses of putrefying matter which are allowed to accumulate. There is no strength of constitution capable of resisting constant exposure to the exhalations which are always arising from these collections of filth. If the inhabitants had the constitutions of those living in Grosvenor-square, they could not permanently resist the malaria which they must breathe night and day. Were they in robust health, and had they, in every other respect, the best means of continuing so, they must inevitably, sooner or later, by the mere residence in these places, either fall into fever, or suffer from some or other of the diseases indirectly produced by the febrile poison.

3. Moreover, these people are exposed to much additional evil from the dampness of their houses. A large portion of Bethnal Green is a swamp, hardly any part of which is drained. In rainy weather some

entire streets are under water, and large collections of stagnant water cover, winter and summer, considerable spaces of ground in every part of the district. The dampness of the houses is an evil almost universally complained of by the inhabitants, as well as the wet and muddy condition of the streets during a considerable part of the year. In the less open parts of Bethnal Green, and in a considerable part of Whitechapel, the closeness of the streets, lanes, alleys, and courts is most oppressive.¹⁶

It is impossible that a population thus lodged should be in a good condition, either physically or morally. The same, indeed, may be said with respect to a population in absolute want of any of the other necessities of life; in the latter case, however, the instant that want is adequately supplied, all further provision is, strictly speaking, a superfluity. The man who dines for 6*d.*, and clothes himself during the year for £5, is probably as healthily fed, and as healthily clad, as if his dinner cost two guineas a day, and his dress £200 a year. But this is not the case with respect to habitation. Every increase of accommodation, from the corner of a cellar to a mansion, as I have already remarked, renders the dwelling more healthy; and, to a considerable extent, the size and goodness of the dwelling tends to render its inmates more civilized. It is unnecessary to dwell on the demoralization that must accompany the extreme degree of crowding that I have described, or the more tolerable but still degraded state of a family occupying a single room. Even when there are a sufficient number of apartments to enable the separation of sexes, still, if those apartments are ill built, or ill ventilated, they must be unhealthy and disagreeable. In all classes of society, but particularly in the lower, many of the domestic virtues depend mainly on a comfortable home. Where that does not exist, the husband and father is almost irresistibly impelled to seek his pleasures abroad, and gradually acquires habits under which the earnings that ought to have clothed and educated, and perhaps, even fed his wife and children, are wasted by the fireside of the public-house. Where the home is miserable, nothing else that is for the common benefit is likely to be attended to.

Dr. Williamson, whose evidence respecting Leeds illustrates all that I have been saying dwells, as indeed do most of the other witnesses, on the different manners in which bad habitation interferes with the education of children. But even if children bred up in such an atmosphere could be well taught, they must want bodily strength, and, so far as it is dependent on bodily organization, mental power. "I have no doubt," says Dr. Williamson, "that the

exposure of successive generations of persons to such circumstances must permanently enfeeble the system and deteriorate the offspring. "An individual," says Dr. Arnott, "the offspring of persons successively living in bad air, will have a constitution decidedly different from that of a man who is born of a race that has inhabited the country any long time: and the race will continue degenerating; it sets its mark upon the person. We can distinguish the inhabitants of a town from those of the country and the inhabitants of these crowded alleys still more."

It may be said, however, that these calamities are not the result of poverty but of ignorance, and that the abodes of our artisans are pestilential not because they cannot afford to be better lodged, but because they are indifferent to the size and to the salubrity of their habitations. This is not altogether true: the laboring classes have little choice of residence, they must in general live near their business or their employer and they can seldom wait in the hope of finding better accommodation. But admitting that the great causes which crowd them in unhealthy residences are their indifference to what we call comfort and their ignorance of the hazards to which they are exposing themselves and their children, still this ignorance and this indifference are the results of poverty. They are not found among the higher and middle classes. They are among the sources of evil excluded by wealth.

I may be told that wealth has its peculiar evils as well as poverty. Without doubt wealth may be abused—so may health, so may bodily strength, and so may intellectual vigor. And I am ready to admit that enormous wealth, the wealth that enables one man to command the labor of three or four thousand families, is a dangerous possession. But the danger arises not from the abundance of the comforts and conveniences which such wealth affords, but from the power which it gives and the admiration which it excites. The comforts enjoyed now by an Englishman with £400 a year, that is to say, commanding the labor of about ten families, could not have been purchased by the Earl of Warwick of the 15th century, who probably could command the labor of ten thousand. And yet the Earl's wealth was too great for his happiness or even his safety. The English gentleman with £400 a year almost grumbles at his poverty. It is only comparative wealth, wealth far exceeding that of a man's associates that is dangerous. And such wealth is, by its definition, rare.* 38

CHAPTER II

POLITICAL AND SOCIAL INSTITUTIONS AFFECTING INDUSTRIAL ENTERPRISE

1. Influence of Government on the Pursuit of Wealth. 2. Insecurity of Property in Ireland. 3. Extortionate Taxation in Egypt, Greece, and Turkey. 4. National Character of the Turks as a Cause of Their Poverty. 5. Titular Nobility and the Caste System. 6. The Superstition of the "Evil Eye."

1. Influence of Government on the Pursuit of Wealth. The degree in which wealth is desirable [may be altered by the government of a country] in two different, indeed nearly opposite, ways: either by diminishing the positive advantages of wealth, or by diminishing the positive disadvantages of poverty.

[The second of these means, to which I slightly alluded in the preceding chapter, will be more conveniently treated at length in Part X of this treatise. As regards] the first, [that] is, of course, very easy. "It is only," says Adam Smith, "under the shelter of the law that the owner of property can sleep a single night in security. He is at all times surrounded by unknown enemies, whom, though he never provoked, he can never appease, and from whose injustice he can be protected only by the powerful arm of the civil magistrate constantly held up to chastise it."¹⁷ And he might have added that in almost all barbarous and semibarbarous countries, and in many that are called civilized the most unappeasable of these enemies is the ruler himself, or those to whom he delegates his authority.

Under an Asiatic despotism, and indeed in every country governed after the Asiatic model, that is to say by local subordinate officers, each absolute within his own district, the possessor of wealth is the natural prey of the man in power immediately above him, just as that man is of his own superior. Under the ruder governments of this kind he is simply plundered from time to time of all that can be discovered and taken from him, without absolutely destroying his power of producing matter for further robbery. Under a somewhat refined despotism, which professes not to

allow arbitrary exaction, the rich man is in a rather worse state. He is then robbed principally by means of condemnations, fines, and forfeitures. This was the state of the proconsular provinces under the Roman Republic. Verres could not, like a Turkish pasha, take whatever he wanted. He was forced to proceed to his ultimate object, confiscation, through the steps of accusation, judgment, scourging, and beheading.

Even when a central government has the strength and the skill, which are necessary to enable it completely to control its subordinates—a state of things which supposes a great advance in practical politics—its exactions, though they may not convert property into a source of danger, may materially interfere with its enjoyment. A government may do this, although its taxes may not be excessive when compared to the whole wealth of its people, if they are imposed in proportion to the apparent means of payment. This is the unavoidable practice of semibarbarous governments. Not possessing the machinery necessary for indirect taxation, or for accurately ascertaining the real wealth of their subjects, they take from every man all that they think he can pay. Every one seeks therefore to baffle the taxgatherer by apparent poverty. Instead of striving, as is the case in civilized communities, to seem rich every one tries to seem poor. The great motive to the acquisition and retention of wealth, the desire of display, is destroyed. The great means, as I shall hereafter show of augmenting wealth, the employment of capital, becomes hazardous. To be employed it must generally be visible, and if visible it is confiscated. It is by this instrument that the Turkish government has destroyed the industry, the wealth and ultimately the population of what were once the most flourishing parts of Asia, perhaps of the world. It was thus that the *taille* ruined the agriculture of the most fertile provinces of France.*³⁹

2. Insecurity of Property in Ireland. [Conditions in Ireland afford a concrete illustration of the general principle discussed in the last section.] Every visitor [of this unfortunate country], even before the present calamity,¹⁸ was struck by the coexistence among the peasantry of extreme poverty and of extreme indolence. Their cabins are half-thatched because they will not take the trouble of repairing them. They are deformed by the accumulation of filth which the slightest exertion would remove. The land for the occupation of which they are ready to risk life and to take it, is suffered to lose a great part of its productive power. I have seen field after

field in which the weeds covered as much space as the crops. From the time that his crops are planted until they are gathered, the peasant and his family are cowering over the fire, or smoking, or lounging before the door, while an hour or two a day employed in weeding their potatoes, or oats, or flax would perhaps increase the produce by one-third. And yet many of the persons thus apparently poor almost to destitution have hoards of money. Ignorant as they are, they yet must know that more industrious cultivation would improve their crops, that a few days' labor would make their cabins water-tight, a few more remove the filth within and without, and a few more convert their rags into clothing. But any signs of prosperity in the land, in the cabin, in the clothes or in the food of the cottier would expose him to some demand from which his apparent destitution exempts him. The competition for land has raised rents to an amount which can be paid only under favorable circumstances. Any accident throws the tenant into arrear and the arrear is kept a subsisting charge to be enforced if he should appear capable of paying it.

Again, in many districts a practice prevails of letting land to joint-tenants, each of whom is responsible for the whole rent. It is not merely the consequence but the intention that those who can afford to pay should pay for those who cannot.

Again, it is from taxation, regulated by apparent property, that all the revenues of the Irish Roman Catholic Church are drawn. The half-yearly offerings, the fees on marriages and christenings, and, what is more important, the contributions to the priest made on those occasions by the friends of the parties, are all assessed by public opinion, according to the proposed means of the payer. An example of the mode in which this works, occurred a couple of years ago, within my own knowledge. £300 was wanted by a loan fund in a Catholic district in the north of Ireland. In the night one of the farmers, a man apparently poor, came to his landlord, the principal proprietor in the neighborhood, and offered to lend the money, if the circumstance could be kept from the priest. His motive for concealment was asked, and he answered that, if the priest knew that he had £300 at interest, his dues would be doubled. Secrecy was promised, and a stocking was brought from its hiding place in the roof, filled with notes and coin, which had been accumulating for years until a secret investment could be found.

Again, for many years past, a similar taxation has existed for political purposes;—the Catholic Rent, the O'Connell Tribute,

and the Repeal Rent, like every other tax that is unsanctioned by law, must be exacted to a larger or smaller amount from every cottier or farmer, as he is supposed to be better or worse able to provide them.

Who can wonder that the cultivator, who is exposed to these influences, should want the industry and economy which give prosperity to the small farmer of Belgium? What motive has he for industry and economy? It may be said that he has the same motive in kind, though not in degree, as the inhabitants of a happier country; since the new demand to which any increase of his means would expose him would not exhaust the whole of that increase. The same might be said of the subjects of the Pasha. There are inequalities of fortune among the cultivators of Egypt just as there were inequalities in that part of France which was under the *taille*. No taxation ever exhausted the whole surplus income of all its victims. But when a man cannot calculate the extent to which the exaction may go—when all that he knows is, that the more he appears to have the more will be demanded—when he knows that every additional comfort which he is seen to enjoy, and every additional productive instrument which he is found to possess, may be the pretext for a fresh extortion, he turns careless or sulky—he yields to the strong temptation of indolence and of immediate excitement and enjoyment—he becomes less industrious and therefore produces less—he becomes less frugal, and therefore if he save at all, saves a smaller portion of that smaller product.* 40

3. Extortionate Taxation in Egypt, Greece, and Turkey. [While visiting Egypt in 1856], I talked one day on this subject with an eminent Egyptian.

The calamity of this country, as of every oriental despotism (he said) is insecurity. Nothing that I possess is really mine. I have a house, the Pasha can take it from me. I have an estate; its taxes now amount to 5,000 piastres a year; he may raise them to 8,000 or 10,000. He may require it to furnish him with camels, oxen, or corn; he may take all the able-bodied men in the village as recruits; he may take all its inhabitants—men, women and children—and send them to dig a canal in the desert. When he has rendered it incapable of paying its taxes, he may seize it for arrears and grant it to one of his favorites. No property, no rank, no institution is safe except the few that enjoy European protection.

“What proportion of the produce,” I asked, “has the government a right to take as land tax?”

"Do not ask," he answered, "about *right* in Egypt: the meaning of the word is not known."

"What proportion then," I said, "is it *customary* to take?"

There is not much more of custom (he answered) than there is of right. It is supposed to depend on the height of the Nile, different proportions are supposed to be taken for a high, for a moderate, and for a low Nile. This has the advantage of interesting the government in the cleaning of the canals.

Mehemet Ali made an average and professed always to take about the same proportion. Since his death, and still more since the death of Abbas, the canals have been more and more neglected and the Abadyeh or uncultivated land is growing. The Murdyrs (local governors) too are less watched and have become more arbitrary and rapacious.

What can be expected from a Curd, who cannot read, who has never before left his tent, or from a Georgian Mountaineer, brought to Egypt to be a governor because he has no connections and no ties there, because he is fit by Nature and by barbarism to be a blind instrument, or from a slave boy bought in Constantinople and educated in the courts and passages of the hareem and suddenly entrusted with absolute power?

I have been talking over this matter (he continued) with a friend who is a considerable landed proprietor. He thinks that on an average, taking in every exaction—the money, the supplies in kind, the requisition of camels, horses and asses—they amount annually to one-half of the gross produce.

"The government then is," I said, "really the landlord of Egypt, for half of the gross produce is an enormous rent."

But that is not all, (he answered). Every inhabitant of a village is surety for every other. My taxes may have been fully paid, but if my neighbors are in arrear, the Nazer (local tax-gatherer) comes on *me*. If I plead poverty, he bastinadoes me to ascertain the truth of the plea. If he can get nothing out of me by fear or by blows he seizes my land—nay one village may be seized for the debt due from another. What is called government in Egypt, or in any Musselman country, is one vast system of robbery. Our only advantage over Turkey is that our robbers are a little more under the influence of European opinion.

"And yet," I said, "you venture to be an occupier of land."

It is true (he answered) that I have had for four years about 500 acres of Abadyeh land. I had about 1,500 to lay out. I might have bought diamonds and put them into a box, and that box into another,

and that into a third, and have covered it over with old clothes and kept it sometimes in one room, sometimes in another. But I was then in office. I thought myself safe from the local tyrants, and by getting a grant of these 500 acres of abandoned land and employing my £1,500 in bringing it into cultivation, I obtain a large interest, and may hope to get back my principal before the government or one of its officers thinks fit to confiscate my farm.

And yet Egypt is by far the best governed country under Musselman rule. Though property is there exposed to the exactions of the government, there is little private robbery, and there is little personal violence. If countries were ranged in a scale, according to their security, Egypt would rank far above the average point.*⁴¹

[When I was in Athens in the fall of 1857], Sir Thomas Wyse took me [to a ball at the King's palace]. We found, in the first of three large rooms, about one hundred and fifty ladies, sitting on one side and about two hundred men standing on the other. Several of the older men looked, what I was told that they had been, robbers. They had risen from that profession to be partisan soldiers, and had been made aristocrats partly by plunder, and partly by gifts from the crown of the national domains.

The palace is said to have cost fourteen millions of drachmas—about £500,000, nearly the annual income of the state. This is as if our queen had spent on palaces sixty-five millions sterling. This expenditure has been made in a country too poor to make a road or to pay a debt. It is a frightful factory-looking building, covered with stucco, with a paltry colonnade in the middle, and two vast flat wings on each side. A Bavarian architect perpetrated it.*⁴²

[In the same year I was in Constantinople. A prominent gentleman called on us.]

"What impression," he said, "does the East produce on you?"

"I have had time,"¹⁹ I said, "only to look at the exterior. I see a capital, the streets of which are impassable to wheels, and scarcely to be traversed on foot. I see a country without a road. I see a palace of the Sultan's on every promontory of the Bosphorus. I see vast tracts of unoccupied land, and more dogs than human beings. These appearances are not favorable to the government or to the people."

If you have the misfortune (he answered) as I have had, to live among Turks for between two and three years, your opinions will be still less favorable. In government and in religion Turkey is a *detritus*. All

that gave her strength, all that gave her consistency, has gone; what remains is crumbling into powder. The worst parts of her detestable religion ²⁰—hatred of improvement and hatred of the unbeliever; the worst parts of her detestable government—violence, extortion, treachery and fraud, are all that she has retained. Never was there a country that more required to be conquered. Our support merely delays her submission to that violent remedy.* ⁴³

4. National Character of the Turks as a Cause of Their Poverty. [One day,²¹ while traveling in Asia Minor,] I supped at X's and met Y,²² an English physician settled at Smyrna, and Mr. Homer, a Greek.

We talked of the degeneracy of the Turks. "How do you account," I asked, "for the strange fact, if it be a fact, that in proportion as they have improved their institutions, in proportion as life and property have been more secure, their wealth and their numbers have diminished? How comes it that the improvement which gives prosperity to every other nation ruins them?"

It is a fact (said Y) that while their institutions have improved, their wealth and population have diminished. Many causes have contributed to this deterioration. The first and great one is, that they are not producers. They have neither diligence, intelligence, nor forethought. No Turk is an improving landlord, or even a repairing landlord. When he has money, he spends it on objects of immediate gratification. His most permanent investment is a timber palace, to last about as long as its builder. His only professions are shopkeeping and service. He cannot engage in any foreign commerce, as he speaks no language but his own. No one ever heard of a Turkish house of business, or of a Turkish banker, or merchant, or manufacturer. If he has lands or houses, he lives on their rent; if he has money, he spends it, or employs it in stocking a shop, in which he can smoke and gossip all day long. The only considerable enterprise in which he ever engages is the farming some branch of the public revenue. His great resource is service, either that of a private person or of the Sultan. People talk of the place-hunting of France and of Germany; it is nothing to that of Turkey. A place closes the vista of every Turk's ambition.

"But," I said, "there was a time when the Turks were rich and prosperous. What difference is there between their national character then and now?"

As respects hope, (answered X) ardor, self-reliance, ambition, public spirit, in short, all that makes a nation formidable, the difference is enormous. Until the battle of Lepanto and the retreat from Vienna,

they possessed the grand and heroic but dangerous virtues of a conquering nation. They are now degraded by the grovelling vices of a nation that relies on foreigners for its defense. But as respects the qualities which conduce to material prosperity, to riches and to numbers, I do not believe that they have changed. I do not believe that they are more idle, wasteful, improvident, and brutal now than they were 400 years ago. But it is only within the last fifty years, that the effects of these qualities have shown themselves fully. When they first swarmed over Asia Minor, Roumelia, and Bulgaria, they seized on a country very populous and of enormous wealth. For 350 years they kept on consuming that wealth and wearing out that population. If a Turk wanted a house or a garden, he turned out a Rayah; if he wanted money, he put a bullet into a handkerchief, tied it in a knot, and sent it to the nearest opulent Greek or Armenian. At last, having lived for three centuries and a half on their capital of things and of men, having reduced that rich and well-peopled country to the desert which you now see it, they find themselves poor. They cannot dig, to beg they are ashamed. They use the most mischievous means to prevent large families; they kill their female children, the conscription takes off the males, and they disappear. The only memorial of what fifty years ago was a populous Turkish village is a crowded burial-ground, now unused.

As a medical man (said Y) I, and perhaps *I* only, know what crimes are committed in the Turkish part of Smyrna, which looks so gay and smiling, as its picturesque houses, embosomed in gardens of planes and cypresses, rise up the hill. I avoid as much as I can the Turkish houses, that I may not be cognizant of them. Sometimes it is a young second wife who is poisoned by the older one; sometimes a female child, whom the father will not bring up; sometimes a male killed by the mother to spite the father. Infanticide is rather the rule than the exception. No inquiry is made, no notice is taken by the police. What occurs within the harem is a privileged mystery. A rich Turk, my patient, was dying of heart complaint. He had two wives, a Greek and a Turk. He suffered much and gave much trouble. His wives were all gentleness and affection in his presence. But their imprecations against him when they had left his room were horrible. The Turkish wife said to me one day, "You know that he must die. It is a pity that he should kill *us*. Can you not give him something to shorten his misery? We would make it worth your while." I have no doubt that he suspected them; he kept imploring me not to leave him. "He was sure," he said, "that he should not live long if a Turkish physician visited him;" probably he was right.

In fact (Y continued) *it is not the improvement of their institutions which has produced their poverty and weakness; but their poverty and weak-*

ness which have produced the improvement of their institutions. When we were forced to submit to their sending ambassadors to the Seven Towers, we never thought of interfering with their misgovernment of Rayahs. When they had shown themselves feeble at home, and absolutely powerless abroad, we began to be shocked with their treatment of our co-religionists. Their reforms have never been voluntary. They have been imposed on them by Europe. Their date is always that of a period of calamity. The defeat at Nezib produced the Hatti-Sherif of Gul-Hâneh; the occupation of Constantinople occasioned the Hatti-Humâyoön.²³

I do not quite agree with you (said Homer). *The improvement of their institutions has, in more than one way, directly contributed to the poverty and weakness of the Turks.* In the first place, it is inconsistent with their position, with the condition of their existence. They are a tribe of robbers. What would have become of his band, if Yani Katergee²⁴ or Simos, had issued a Hatti-Humâyoön prohibiting the taking of ransoms, or the cutting off the ears of those whose ransoms were not paid? A people who, as Y has truly stated, do not produce, must perish if they cease to steal. And secondly, the increased security of life and property has enabled the Christians to oust the Turks from many of the employments which were formerly open to them. Our increasing wealth produces more than a proportionate expenditure on education. Wherever there is a Greek village, there is a school. Small as our numbers are, there are ten, perhaps twenty, perhaps fifty, educated Greeks for one educated Turk. Every post requiring knowledge, diligence, or intelligence is filled by a Greek. Whenever a Turk borrows, the lender is a Greek. Whenever a Turk sells, the purchaser is a Greek; and it is seldom that a Turk borrows without having soon to sell. The proud Turks are thus becoming an inferior race in their own country. They appear still to retain its administration. They are the pashas, beys, moollahs and cadies, but for the details of their administration they are forced to trust to Greeks; and those who manage the details of business, especially when a Turk is the superior, are the real administrators.

"And how," I asked, "is this to end? How is the sick man to die?"

It may end (said Y) by foreign conquest, or by foreign interference. But it seems to me certain that, if Europe does not intervene, the Christians, superior in wealth, superior in intelligence, and every day approaching nearer to equality in numbers, must at no distant period force the Turks to yield to them superiority of power.*⁴⁴

"I am struck," I said [on another occasion], "by the uniform repugnance of all my friends to the Turks. Hatred, contempt, or

disgust seem to be the feelings which they excite among all the Christians who come in contact with them."

I do not believe (answered Y) that we *can* sympathize with them. I scarcely think that we belong to the same species. The head of a Turk, unless it be the head of a Turk born of a Circassian mother, has much less brain than that of a European, especially as respects the organs of the nobler faculties. His forehead is low, and recedes at almost an acute angle. He cannot reason, there is no logical sequence in his ideas. He has a vivid conception and imagination, but little abstraction. His thoughts do not form themselves, as those of a European do, into words. Remembrances of past pains and pleasures, principally sensual ones, and anticipations of future ones, float through his mind. He meditates much more on the subjects which he wishes to attain, than on the means of attaining them; just as the Koran revels in descriptions of the joys of paradise, but scarcely alludes to the virtues which are to qualify us for entering it.

"But the Turk," I said, "must have some virtues, or he could not have conquered and retained an empire."

The Turk of the 15th century (answered Y) was a different person from the Turk of the 19th. He was athletic and vigorous, he lived in exercise and in the open air. He was not the sedentary, smoking sensualist that he is now; but I will not deny that even the degenerate Turk has some virtues. He is sober. All classes are sober in eating, the great majority are sober in drinking. He is sober in conduct, he is not easily ruffled or easily excited. He is calm in both good and bad fortune. He is eminently hospitable and charitable. Unhappily his virtues wither under the rays of prosperity. The poor Turk is honest and humane, the Turkish private soldier is brave. The rich Turk is always an oppressor. As soon as the Turkish officer thinks life worth having he takes care of it.

His great misfortune is, that he does not possess the capacity of indefinite improvement which belongs to the European race. Like the Chinese, the Hindoos, and, in fact, all the Asiatics, there is a degree, and not a high one, of civilization which he cannot pass, or even long preserve. He reached it 300 years ago and has receded ever since.

The distinguishing characteristic of the real Asiatic is, intellectual sterility and unfitness for change. One nation, to save itself trouble, declares that its laws shall be immutable. Another institutes caste, and makes all further improvement impossible. Another protects itself against new ideas, by refusing all intercourse with foreigners. An Asiatic had rather copy than try to invent, rather acquiesce than discuss, rather attribute events to destiny than to causes that can be

inquired into and explained. His only diplomacy is war; his only internal means of government are poison, the stick, and the bowstring.

In the Turk these peculiarities are exaggerated. Whatever be his purpose, he uses the means which require the least thought. If he has to create a local government, he simply hands over to the Pasha all the powers of the Sultan. If he wants money, he takes it wherever he can find it; and if he cannot get it by force, he puts up to auction power, justice, the prosperity, and indeed the subsistence, of his subjects. He averts the dangers of a disputed succession by killing all the nephews of the Sultan, or preventing any from coming into existence. He relies on the rain for washing his streets, on the dogs for keeping them free from offal, on the sun for making possible the tracks which he calls roads, and on the climate for enabling him to live in his timber house without repairing it. For everything else he relies on Allah, and entreats God to do for him what he is too torpid to do for himself. His fatalism is, in fact, indolence in its most exaggerated form. It is an escape, not only from exertion, but from deliberation.

Our attempts to improve the Turks put me in mind of the old story of the people who tried to wash the negro white. He never was, or will be, or can be anything but a barbarian.*⁴⁵

5. Titular Nobility and the Caste System. Another mode to make wealth less desirable is to confine the higher distinctions of society to that which wealth cannot purchase, birth. No wealth can raise a Sudra to the social eminence enjoyed by the poorer Brahman. Until the Revolution destroyed feudal prejudices in France and weakened them everywhere else, the separation on the Continent of Europe between noble²⁵ and *roturier*, between *Bürger* and *Edelman* was nearly as wide and as impassable as that which divides the castes of Hindostan.

A rich *roturier* was of course a greater man than a poor one, but whatever were his wealth he could not freely associate with the most embarrassed noble. To a certain degree an exception was made in favor of men of letters and of artists: but even they, though admitted to familiarity, were not received as equals; and the display of mere wealth instead of giving importance to the *Bürger* made him ridiculous. On the other hand almost all roads to wealth, excepting service in the army or in the high offices of the state, were tians,† against the nobles. By engaging in business or in a profession proaching man *derogait*, that is, lost caste, more effectually than an force the TURK man would by keeping a shop. Even the sort of

"I am struck," I said, which could be acquired in France by serving cer-
repugnance of all my friends as inconsistent with lucrative employment.

Turgot ascribes the poverty of Angoulême, a town admirably situated for commerce just where the Chareute becomes navigable, to the facility of obtaining titular nobility, by serving as Mayor. Every one, he said, who had acquired by business fortune enough to be able to subsist without it, relinquished it to become noble, and then, in the compulsory idleness of his new position gave up the means of increasing his capital, even if he did not waste it.²⁶

*Wilhelm Meister*²⁷ contains an amusing illustration of the inferiority of the *Bürger* station and of the difficulty of escaping from it; the value of which as testimony is increased by the circumstances that, as far as feelings are concerned, the novel is Goethe's autobiography.

Wilhelm is the only son of a rich merchant. He leaves home on a long tour and is still absent at his father's death. It is proposed to him by his father's partner to continue the business. But he has imbibed a taste for a different kind of society and for different pursuits. He wishes to be an accomplished man. But this, he says in answer to his friend, is impossible for a *Bürger*. He must devote himself to one pursuit, cultivate one talent at the expense of all others, and give up the attempt at completeness or harmony of character. His behavior should always show a silent consciousness that there is a barrier before him which must not be crossed. Dignity of manner would be absurd, coolness would be impertinent, and frankness offensive. As the only means, therefore, of becoming a gentleman he turns actor.*⁴⁶

6. The Superstition of the "Evil Eye." [Another social phenomenon tending to counteract the normal desire for wealth consists of the superstitious fear of the evil eye prevailing in half-civilized communities, especially in Oriental countries. When traveling in Egypt in 1856, I had occasion to talk one day with Stephan Bey] of the habits of expenditure among the Egyptians.

They are small [remarked Stephan Bey] even among the rich. The fear of the evil eye, the fear of extortion, and the absence of intercourse between different families, which makes the bazaar or the coffee-house the place of meeting, take away the principal motives to extravagance. As the exports of Egypt far exceed in value the imports, large sums of specie must come annually into the country. They are not exported, for the exchange is generally in favor of Egypt. They do not remain in circulation, for the scarcity of specie is a constant complaint. You must have found the difficulty of getting change at our shops. They are hoarded. The instinct of an Egyptian, as soon as he gets hold of a

piece of gold, is to hide it; he often dies without divulging his hiding-place. Egypt is full of concealed treasures. If ever we enjoy a really good government, and can add to our habits of economy the habits of enterprise and exertion which belong only to well-governed nations, Egypt will become one of the richest countries in the world.

"It seems to me" [I said] "that the prohibition of taking interest must materially interfere with the commercial progress of every Mussulman country."

They would get over that difficulty [Stephan replied] by an interpretation. The Koran forbids any man to make on his capital a profit of more than ten per cent, but I am not aware of any instance in which that prohibition has been voluntarily obeyed.

"Does the mischievous influence of the evil eye" [I asked] "depend on the will of the person whose glance does the mischief?"

Not altogether [Stephan answered]. An intention to harm may render more virulent the poison of the glance, but envy, or the desire to appropriate a thing, or even excessive admiration, may render it mischievous, without the consciousness or even the will of the offender. It injures most the thing that it first hits: hence the bits of red cloth that are struck about the dresses of children and the trappings of camels and horses, and the large spots of lampblack which you may see on the foreheads of children. They are a sort of conductors. It is hoped that they will attract the glance, and exhaust or deaden the venom.

It is difficult to enumerate all the ways [Stephan continued] in which this superstition interferes with the comforts and the habits of the people. Children are supposed to be peculiarly coveted. They are kept, therefore, as much as possible at home, without air or exercise, out of the reach of admiration. If they go abroad they are intentionally dirty and ill-dressed. A fine house, fine furniture, a fine camel, a fine horse, are all enjoyed with fear and trembling, lest they should excite envy and bring misfortune. A butcher would be afraid to hang up fine meat in his shop, lest the evil eye of passers-by who might covet it should taint it and render it unwholesome.

At the bottom of this superstition, I believe to be a great prevalence of envy among the lower Egyptians. You see it in all their fictions. Half the malevolence described in the *Arabian Nights* is attributed not, as it would be in an European fiction, to some insult or injury inflicted by the person who is its object, but the mere envy of wealth, or other means of happiness, honorably acquired and well used.* ⁴⁷

CHAPTER III

THE GRATIFICATION OF HUMAN DESIRES THROUGH THE CONSUMPTION OF WEALTH

1. The Love of Variety and the Standard of Living: Necessaries, Decencies, and Luxuries. 2. Economic Effects of Luxurious Expenditure. 3. Unproductive Consumption vs. Unproductive Consumers. 4. Unproductive Expenditures and the Demand for Employment.

1. The Love of Variety and the Standard of Living: Necessaries, Decencies, and Luxuries. [With reference to human wants, articles of wealth may be conveniently divided into three great classes: *necessaries*, *decencies*, and *luxuries*. These] terms have been used ever since the moral sciences first attracted attention, but with little attention to precision or to consistent use. I feel [therefore] that I ought to explain, as precisely as I can, what I mean by [these] words.

It is scarcely necessary to remind [the reader] that they are relative terms, and that some person must always be assumed with reference to whom a given commodity or service is a luxury, a decency, or a necessary.

By *necessaries*, then, I express those things the use of which is requisite to keep a given individual in the health and strength essential to his going through his habitual occupations.

By *decencies*, I express those things which a given individual must use in order to preserve his existing rank in society.

Everything else of which a given individual makes use, or, in other words, all that portion of his consumption which is not essential to his health and strength, or to the preservation of his existing rank in society, I term *luxury*.* 48

The mere necessities of life are few and simple. Potatoes, water, and salt, simple raiment, a blanket, a hut, an iron pot, and the materials of firing, are sufficient to support mere animal existence in this climate—they do, in fact, support the existence of the greater part of the inhabitants of Ireland; and in warmer countries much less will suffice. But no man is satisfied with so limited

a range of enjoyment. His first object is to vary his food; but this desire, though urgent at first, is more easily satisfied than any other, except perhaps that of dress. Our ancestors, long after they had indulged in considerable luxury in other respects, seem to have been contented with a very uniform though grossly abundant diet. And even now, notwithstanding the common declamation on the luxury of the table, we shall find that most persons, including even those whose appetites are not controlled by frugality, confine their principal solid food but to a few articles, and their liquids to still fewer.

The next desire is variety of dress—a taste which has this peculiarity that, though it is one of the first symptoms that a people is emerging from the brutishness of the lowest savage life, it quickly reaches its highest point; and in the subsequent progress of refinement, in one sex at least, diminishes until even the highest ranks assume an almost Quaker-like simplicity.

Last comes the desire to build, to ornament, and to furnish—tastes which are absolutely insatiable where they exist, and seem to increase with every improvement in civilization. The comforts and conveniences which we now expect in an ordinary lodging are more than were enjoyed by people of opulence a century ago; and even a century ago a respectable tradesman would have been dissatisfied if his bedroom had been no better furnished than that of Henry VIII, which contained, we are told, only a bed, a cupboard of plate, a joint-stool, a pair of andirons, and a small mirror.²⁸ And yet Henry was among the richest and the most magnificent sovereigns of his times. Our great-grandchildren perhaps will despise the accommodations of the present age, and their poverty may, in turn, be pitied by their successors.*⁴⁹

It is obvious that when consumed by the inhabitants of different countries, or even by different individuals in the same country, the same things may be either luxuries, decencies, or necessities.

Shoes are necessities to all the inhabitants of England. Our habits are such that there is not an individual whose health would not suffer from the want of them. To the lowest class of the inhabitants of Scotland they are luxuries: custom enables them to go barefoot without inconvenience and without degradation. When a Scotchman rises from the lowest to the middling classes of society, they become to him decencies. He wears them to preserve, not his feet, but his station in life. To the highest class, who have been accustomed to them from infancy, they are as much necessities as as they are to all classes in England. To the higher classes in Tur-

key wine is a luxury and tobacco a decency. In Europe it is the reverse. The Turk drinks and the European smokes, not in obedience, but in opposition both to the rules of health and to the forms of society. But wine in Europe and the pipe in Turkey are among the refreshments to which a guest is entitled, and which it would be as indecent to refuse in the one country as to offer in the other.

It has been said that the coal-heavers and lightermen, and some others among the hard-working London laborers, could not support their toils without the stimulus of porter. If this be true, porter is to them a necessary. To all others it is a luxury. A carriage is a decency to a woman of fashion, a necessary to a physician, and a luxury to a tradesman.

The question, therefore, whether a given commodity is to be considered a decency or a luxury, is obviously one to which no answer can be given unless the place, the time, and the rank of the individual using it be specified. The dress which in England was only decent a hundred years ago, would be almost extravagant now, while the house and furniture which now afford merely decent accommodation to a gentleman, would then have been luxurious for a peer.

The causes which entitle a commodity to be called a necessary are more permanent and more general. They depend partly upon the habits in which the individual in question has been brought up, partly on the nature of his occupation—on the lightness or the severity of the labors and hardships that he has to undergo—and partly on the climate in which he lives. Of these causes I have illustrated the two first by the familiar examples of shoes and porter. But the principal cause is climate. The fuel, shelter, and raiment, which are essential to a Laplander's existence, would be worse than useless under the tropics. And as habits and occupations are very slowly changed, and climate suffers scarcely any alteration, the commodities which are necessities to the different classes of the inhabitants of a given district may, and generally do, remain for centuries unchanged, while their decencies and luxuries are continually varying.* ⁵⁰

It is obvious, however, that our desires do not aim so much at quantity as at diversity. Not only are there limits to the pleasure which commodities of any given class can afford, but the pleasure diminishes in a rapidly increasing ratio long before those limits are reached. One had rather, to be sure, have a couple of horses than one, but they would not afford twice the pleasure, and still less

would ten give five times the pleasure of two. In furnishing a house, we soon satisfy our utmost wish for chairs and turn our attention to beds, tables, etc. In proportion, therefore, as any article is abundant the number of those who are provided with it, and do not wish, or wish but little, to increase their provision, is likely to be great; and, so far as they are concerned, the additional supply loses all, or nearly all, its utility. And in proportion to its scarcity the number of those who are in want of it, and the degree in which they want it, are likely to be increased; and its, *utility*, or, in other words, the pleasure which the possession of a given quantity of it will afford, increases proportionally.* ⁵¹

2. Economic Effects of Luxurious Expenditure. There are few triter subjects of declamation than the contrast between ancient simplicity and modern luxury. Few virtues, however useful, have received more applause than the contented and dignified poverty, the indifference to display, and the abstinence from unnecessary expense, which all refined nations attribute to their ancestors. Few vices, however mischievous, have been more censured than the ostentatious expenditure which every succeeding generation seems to consider as its own characteristic.

It certainly seems at first sight that habits of unnecessary expenditure, as they have a tendency to diminish the wealth of an individual, must have the same effect on the wealth of a nation. And, separately considered, it appears clear that each act of unproductive consumption, whatever gratification it may afford to the consumer, must, *pro tanto*, impoverish the community. It is so much taken from the common stock and destroyed. And as the national capital is formed from the aggregate savings of individuals, it is certain that if each individual were to expend to the utmost extent of his means, the whole capital of the country would be gradually wasted away, and general misery would be the result. But it appears equally certain that if each individual were to confine his expenditure to mere necessities, the result would be misery quite as general and as intense.

[As will be shown at length in a future Part of this work,] the powers of population, if not restrained by prudence, must inevitably produce almost every form of moral and physical evil. In the case which I am supposing, the wants of society would be confined to the food, raiment, and shelter essential to the support of existence; and they would all consist of the cheapest materials. At present, among civilized nations, the cultivation of the land employs only a portion

of its inhabitants, and, generally speaking, as a nation increases in wealth, a smaller and smaller proportion—in England, not one-third; and a great part of the laborers so employed are producers of luxuries. Indeed, as potatoes afford a food five or six times as abundant as corn, and more than twenty times as abundant as meat, and, as far as can be judged by the appearance and powers of the lower Irish, quite as wholesome, meat and corn may be considered luxuries, to the extent in which they are more expensive than potatoes. Nor, consistently with the existence of private property, and of the desire of wealth, can the mode of cultivation be directed to the obtaining the largest possible return. The object is to obtain the largest return that is consistent with profitable farming; but in the pursuit of this object, quantity of produce must often be sacrificed to economy of labor or time.

If there were no desire for anything beyond necessities, both the existing partition of the land and the existing division of labor would be varied. No family would wish to occupy more land than the small plot necessary to afford them potatoes and milk. Supposing them to give to it the utmost nicety of garden cultivation, its management would still leave them time to produce the coarse manufactures necessary for their own use. The whole of the population would be agricultural; 761,348 families so employed at present in England, although their labor is far from being directed to the production of the greatest possible amount, provide, without much assistance from importation, subsistence for the whole of our 2,745,336 families. If all were so employed, and if quantity of produce were their sole object, it is probable that in ordinary seasons the soil of England, instead of fifteen millions, could feed at least sixty millions of people; and that of Europe, instead of two hundred, eight hundred millions. And that, in the absence of any checks more powerful than those experienced in the United States of America, the population of Europe might, in fifty years, amount to eight hundred millions. Indeed, it is probable that, under the circumstances which I am supposing, the increase in Europe would be for a considerable time rather more rapid than that which has taken place in America. Preventive checks would not exist. Marriages could not be hindered or even delayed by prudence, since there could be no reason to anticipate want; and the habit of early marriages would put an end to profligacy. As all our habits would be eminently healthy, the destructive checks would be reduced to their minimum.

So far the picture is rather pleasing. It exhibits a state of society, not rich certainly, nor refined, but supporting a very numerous population in health and strength, and in the full enjoyment of the many sources of happiness connected with early marriage. But it is obvious that this could not last forever—it could not last, indeed, for two hundred and fifty years. By that time the population of Europe would amount to above three million millions, a number which the wildest imagination cannot conceive capable of existing simultaneously on the whole earth.

Sooner or later, therefore, the increase must be checked; and, [as will be shown hereafter], prudence ²⁹ is the only check that does not involve vice or misery. But such is the force of the passions which prompt to marriage, and such is each man's reliance on his own good conduct and good fortune, that the evils, whatever they may be, the apprehension of which forms the prudential check, are frequently incurred. Where that evil is the loss of luxuries, or even of decencies, it is trifling in the first case, and bearable in the second. But in the case which I am supposing, the only prudential check would be an apprehended deficiency of necessities; and that deficiency, in the many instances in which it would actually be incurred, would be the destructive check in its most frightful form. It would be incurred not only in consequence of that miscalculation of chances to which all men are subject—and certainly those not the least so who are anxious to marry—but through accidents against which no human prudence can guard. A *single* bad harvest may be provided against, but a succession of unfavorable seasons (and such successions do occur) must reduce such a people to absolute famine.³⁰

When such seasons affect a nation indulging in considerable superfluous expenditure, they are relieved by a temporary sacrifice of that superfluity. The grain consumed in ordinary years by breweries and distilleries is a store always at hand to supply a scarcity; and the same may be said of the large quantity of food raised for the support of domestic animals, but applicable to human subsistence. To these resources may be added the importation from abroad of necessities instead of luxuries and the materials of luxury—of corn, for instance, instead of wine.

It appears, therefore, that habits of considerable superfluous expenditure afford the only permanent protection against a population pressing so closely on the means of subsistence as to be continually incurring the misery of the destructive checks. As these habits can exist only in an opulent society, it appears to me equally

clear that, as a nation advances in opulence, the destructive checks are likely to be superseded by the preventive. If this be true, the danger of a redundant population, or, to speak more intelligibly, of a population too numerous to be adequately and regularly supplied with necessities, is likely to diminish in the progress of improvement. As wealth increases what were the luxuries of one generation become the decencies of their successors. Not only a taste for additional comforts and conveniences but a feeling of degradation in their absence becomes more and more widely diffused.* 52

3. Unproductive Consumption vs. Unproductive Consumers. Economists have in general opposed consumption to production. They have defined consumption to be the destruction wholly, or in part, of any portion of wealth. And they consider it as the ultimate object of all production.

Tout ce qui est produit (says M. Say) est consommé; par conséquent, toute valeur créée est détruite, et n'a été créée que pour être détruite. 31

By consumption (says Mr. McCulloch) is meant the annihilation of those qualities which render commodities useful or desirable. To consume the products of art and industry is to deprive the matter of which they consist of utility, and consequently of the exchangeable value communicated to it by labor. Consumption is, in fact, the end and object of human exertion; and when a commodity is in a fit state to be used, if its consumption be deferred, a loss is incurred. 32

That almost all that is produced is destroyed is true; but I cannot admit that it is produced for the purpose of being destroyed. It is produced for the purpose of being made use of. Its destruction is an incident to its use, not only not intended, but as far as possible avoided. In fact, there are some things which seem unsusceptible of destruction except by accidental injury. A statue in a gallery, or a medal or a gem in a cabinet, may be preserved for centuries without apparent deterioration. There are others, such as food and fuel, which perish in the very act of using them; and hence, as these are the most essential commodities, the word consumption has been applied universally. But the bulk of commodities are destroyed by those numerous gradual agents which we call collectively *time*, and the action of which we strive to retard. If it be true that consumption is the object of all production, the inhabitant of a house must be termed its consumer; but it would be strange to call him its destroyer, since it would unquestionably be destroyed much sooner if uninhabited.

It would be an improvement in the language of political economy if the expression "to use" could be substituted for that "to consume." There is, however, so much difficulty in changing an established nomenclature, that I shall continue to use the word consumption, premising that I use it to signify primarily the making use of a thing—a circumstance to which its destruction is generally, but not necessarily, incidental.

The wealth of a country will much depend on the question, whether the tastes of its inhabitants lead them to prefer objects of slow or of rapid destruction. It will depend, however, much more on their preference of productive or unproductive consumption.³³

Productive consumption is that use of a commodity which occasions an ulterior product. *Unproductive consumption* is of course that use which occasions no ulterior product. The characteristic of unproductive consumption is, that it adds to the enjoyment of no one but the consumer himself. Its only effect upon the rest of the community is to diminish, *pro tanto*, the mass of commodities applicable to their use.

Some commodities are unsusceptible of any but unproductive consumption; such are lace, embroidery, jewelry, and the other personal ornaments which are simply decorative, and afford neither warmth nor protection. Under this head may also be ranked tobacco and snuff, and the other stimulants, of which the best that can be said is, that sometimes they are not injurious. A much larger class of commodities is designed solely for productive use, and is never consumed unproductively, but by mistake. In this class are all tools, from the simplest to the most complicated—from the spade and the raft, to the steam engine and the Indiaman. But the bulk of commodities may be used, according to the will of the proprietor, productively or unproductively—may be consumed so as to substitute some product in lieu of that which has been destroyed, or without any further beneficial result than the immediate pleasure which has accompanied their use. Whatever is capable of supporting human existence may be used to maintain those who are themselves producers, or those who are not. In the first case it is productively, in the second unproductively, consumed.

The distinction between productive and unproductive consumers is less clearly marked than that between productive and unproductive consumption. To divide men into two classes, productive and unproductive consumers, would, in fact, be a false division, there being few who do not in some respects belong to both classes. So

far as a man's consumption is essential to his production, he belongs to the first class; so far as it is not essential, to the second. Those only can be called simply unproductive who return nothing whatever for what they consume; those only simply productive who indulge in no superfluous consumption whatever.

To the first description belong those who, being provided, through their own previous exertions, or by the accidents of donation or inheritance, with a fund sufficient for their subsistence, are content to dedicate their revenue and their leisure to the purposes of mere enjoyment. This class is never large in any state of society.

Among civilized nations the love of accumulation, of power, of distinction, and of occupation, and the nobler desire of being more or less extensively useful, all powerfully counteract the slothful principles of our nature. As property becomes more secure, as the avenues to influence are opened, as merit and wealth rise in public estimation over the accidents of birth, as barbarous prejudices degrading to industry wear out, as the influence of sound religion teaches men that they were created for better purposes than selfish pleasure or useless mortification, in fact, as civilization improves, all the motives to voluntary exertion acquire force. And though the number of those who *might* live in idleness increases, the proportion of those who are unhappy enough to exercise that privilege diminishes.

Another class consists of those who derive their support solely from the spoil or the charity of others. The number of those who live by rapine has obviously a tendency to diminish in the progress of civilization. About mendicancy there may be some doubt, as some superfluous wealth seems necessary to its existence, and it may be supposed likely to increase with the superfluity on which it feeds. That laws ill-framed or ill-administered may allow it so to increase we know from our own experience. But there seems to be no reason to doubt that, under a wise system of commercial and municipal legislation, the number of able-bodied paupers might be so reduced as to be practically unimportant.

The last class of unproductive consumers consists of those whom age or infirmity has rendered permanently incapable of production. I say *permanently*, to exclude children, and those suffering under temporary disability. Though a child or an invalid make no immediate return, their support is the necessary condition of their future services. This is by far the largest of the unproductive classes, and one not likely to suffer relative diminution: the same

causes which tend to obviate disease and injury tending also to prolong life where their effects are incurable. But from the information collected in the House of Commons' *Report on Friendly Societies*, 5th July, 1825, vol. iv, I am inclined to think that in this country the class in question cannot amount to a fortieth part, or about two and a half per cent of the whole community.

The number of absolutely productive consumers—that is, of persons who consume solely for the purpose of reproducing—is much smaller. It may be a question indeed whether in a country free from slavery, or regulations resembling slavery, any such class is to be found. The humblest laborer has some expenses which are not essential to his health and strength. We endeavor to give to our domestic animals nothing beyond what is strictly necessary; and in the countries where man is considered as a domestic animal, it might be expected that the consumption of a slave would be equally limited. But even the slave generally acquires some peculium, which implies that his ordinary subsistence somewhat exceeds his wants.

It appears from this analysis that the bulk of the community are neither productive nor unproductive consumers, but may be referred to the one class or to the other, according to the portion of their expenses for the time being under consideration. So far as the husbandman takes just enough of the least expensive food, is just sufficiently clad with the simplest raiment, and inhabits a dwelling just sufficiently weather-tight and spacious to protect him from the seasons, he is a productive consumer. But his pipe and his gin, and, generally speaking, his beer, and the humble ornaments of his person and his dwelling, form his unproductive consumption.

I do not, of course, mean it to be inferred that all personal expenditure beyond mere necessities is necessarily unproductive. The duties of those who fill the higher ranks in society can seldom be well performed unless they conciliate the respect of the vulgar by a certain display of opulence. If a judge or an ambassador, required by his station to support an establishment costing £2,000 a year, should spend £4,000, half of his consumption would be productive, and the other half unproductive. It would be a great mistake, however, to consider the third footman behind his coach, though a mere useless weight to the horses, an unproductive consumer. What the footman consumes are his wages; and, so far at least as he consumes them in order to enable himself to perform his services as footman, he is a productive consumer. The things

unproductively consumed are his services, and *they* are consumed by his master.³⁴ Nor is it to be supposed, on the other hand, that all consumption, even of necessities, by those who are themselves producers, is a productive consumption. The half-employed pauper, whose labor is worth £10 a year, and whose consumption is £20, consumes unproductively the difference.*⁵³

4. Unproductive Expenditure and the Demand for Employment.

I have already stated my opinion that the existence, not of unproductive consumers, but of unproductive consumption is the only defense against that worst of social evils, the prevalence of the destructive checks to population. But the utility of unproductive consumers appears to me not only one of the most erroneous, but one of the most dangerous opinions which has recently been advanced.*⁵⁴

If a landlord or a capitalist [says Ricardo] expend his revenue in the manner of an ancient baron, in the support of a great number of retainers or menial servants, he will give employment to much more labor than if he expended it on fine clothes or costly furniture.

In both cases the net revenue would be the same, and so would be the gross revenue, but the former would be realized in different commodities. If my revenue were £10,000, the same quantity nearly of productive labor would be employed, whether I realized it in fine clothes and costly furniture, etc., or in a quantity of food and clothing of the same value. If, however, I realized my revenue in the first set of commodities, no more labor would be *consequently* employed; I should enjoy my furniture and my clothes, and there would be an end of them. But if I realized my revenue in food and clothing, and my desire was to employ menial servants, all those whom I could so employ with my revenue of £10,000, or with the food and clothing which it would purchase, would be to be added to the former demand for laborers, and this addition would take place only because I chose this mode of expending my revenue. *As the laborers, then, are interested in the demand for labor, they must naturally desire that as much as possible should be diverted from expenditure on luxuries, to be expended in the support of menial servants.*

In the same manner a country engaged in war, and which is under the necessity of maintaining large fleets and armies, employs a great many more men than will be employed when the war terminates, and the annual expenses which it brings with it cease.

If I were not called upon for a tax of £500 during the war, which is expended on men in the situations of soldiers and sailors, I might probably spend that portion of my income on furniture, clothes, books, etc.; and whether it was expended in the one way or the other, there would be the same quantity of labor employed in production; for the food and

clothing of the soldier and sailor would require the same amount of industry to produce them as the more luxurious commodities: but, in the case of war, there would be the additional demand for men as soldiers and sailors; and, consequently, a war which is supported out of the revenue, and not from the capital of a country, is favorable to an increase of population.

At the termination of the war, when part of my revenue reverts to me, and is employed as before in the purchase of wine, furniture, or other luxuries, the population which it before supported, and which the war called into existence, will become redundant, and by its effect on the rest of the population, and its competition with it for employment, will sink the value of wages, and very materially deteriorate the condition of the laboring classes.³⁵

Mr. Ricardo's theory is, that it is more beneficial to the laboring classes to be employed in the production of *services* than in the production of *commodities*: that it is better for them to be employed in standing behind chairs than in making chairs; as soldiers or sailors, than as manufacturers. [He] seems to have been led to his conclusions by observing that the wages of servants, sailors, and soldiers, are principally paid in kind—those of artisans in money. He correctly states that if a man with £10,000 a year spends his income in the purchase of commodities for his own use, he retains, after having made those purchases, no further fund for the maintenance of labor; but that if he spends it in the purchase of commodities to be employed in maintaining menial servants, he has in those purchased commodities a new fund with which he can maintain a certain number of menial servants. It appeared to him, therefore, that the landlord would, in the latter case, be able to spend his income twice over—to subsist twice as many persons as before.

It did not occur to him that the landlord, by purchasing himself the subsistence of his servants, merely does for them what they would be able to do better for themselves; that, instead of spending his own income twice over, he merely takes on himself the business of spending theirs for them. He did not perceive that all that the landlord spends in purchasing the subsistence and clothing of his servants, is so much deducted from what he would otherwise have to pay to them in money, to be by them employed in the purchase of subsistence and clothing; and that if he were to give to his servants the value of their whole subsistence in money, the whole body of laborers would be just as well maintained as in the supposed case of his purchasing their subsistence, and then giving it to them in exchange for their services. No one would maintain that, if it were

the general practice in this country, as it is in India, to give to servants board wages, the demand for labor would be lessened; or that if it were the practice, as it is in semibarbarous countries, to maintain servants to produce within their masters' walls the commodities which we are accustomed to purchase from shops, such as the fine clothes and furniture to which Mr. Ricardo alludes, the demand for labor would be increased. Still less could it be maintained, that if those servants, instead of producing commodities, were employed in following their master's person, or mounting guard before his door, such a change would create an additional demand for men, and be favorable to an increase of population.

So far am I from concurring in Mr. Ricardo's opinion, that it is the interest of the laborers that revenue should be spent rather on services than on commodities, that I believe their interest to be precisely opposite.

In the first place, the laborer can generally manage better his own income than it can be managed for him by his master. If a domestic servant could earn as wages the whole sum which he costs his master, even if he were to spend it as he received it, he would probably spend it with more enjoyment.

Secondly, the income spent on services is generally spent in the purchase of what perishes at the instant of its creation; that spent on commodities often leaves results which, when their first purchaser has done with them, are serviceable to others. In this country the poor are to a great extent clothed with garments originally provided for their superiors. In all the better class of cottages may be found articles of furniture which never could have been made for their present possessors. A large portion of the commodities which now contribute to the comfort of the laboring classes would never have existed if it had been the fashion in this country, during the last fifty years, to prefer retinue and attendance to durable commodities.

Thirdly, the income employed on commodities is favorable to the creation of capital; that employed on services is not. An industrious artisan can often save a large portion of his income, and invest it with great and immediate profit. He purchases with his savings a small stock of tools and materials, and, by the vigilance and activity which can be applied only to a small capital, renders every portion of it efficient. The ancestors, and not the remote ancestors, of some of our richest and our proudest families, the authors of some of our most valuable discoveries, were common

mechanics. What menial servant has in this country, and in modern times, been a public benefactor, or even raised himself to affluence? Both history and observation show, that those countries in which expenditure is chiefly employed in the purchase of services, are poor and those in which it is chiefly employed on commodities are rich.

Mr. Ricardo's theory as to the effects of war is still more strikingly erroneous. It is, in the first place, open to all the objections which I have already opposed to his views respecting menial servants. The revenue which is employed in maintaining soldiers and sailors would, even if unproductively consumed, maintain at least an equal number of servants and artisans; and that portion of it which would have been employed in the maintenance of artisans would (as we have seen) have been far more beneficially employed. The demand for soldiers and sailors is not, as he terms it, an additional, it is merely a substituted demand. But a great part of that revenue would have been productively consumed. Instead of employing some laborers in converting suburbs into fortifications, and forests into navies, to perish by dry rot in harbor, or by exposure at sea, and others in walking the deck and parading on the rampart, it would have employed them in adding more and more every year to the fund from which their subsistence is derived. *War is mischievous to every class in the community; but to none is it such a curse as to the laborers.**⁵⁵

If fewer fleets and armies could preserve the peace—that is, if labor were more productive in affording security—the laboring classes would be better off, just as they would be better off if fewer husbandmen or artisans could obtain, directly or indirectly, the same quantity of corn—that is, if labor were more productive in supplying food. But it is equally clear that all the labor that is employed in the support of unnecessary establishments, and all the surplus labor which is employed in supporting, on an unnecessary scale of expense, those establishments which are strictly wanted, is so much taken from the revenue of the whole people. Still more injurious is the employment of labor for purposes not merely useless, but positively mischievous—in the support of pagodas and friars to disseminate a demoralizing superstition; in the support of armies and navies to plunder the commerce and ravage the territories of states whom nature enabled to confer mutual benefits, [whereas] the folly and wickedness of their rulers force to inflict mutual evil; or in the support of barriers and block-

ades to maintain the commercial war in which nations are accustomed to spend the breathing time of actual hostility.* ⁵⁶

Those who maintain that unproductive consumption does good by affording employment, must forget that it is not employment, but food, clothing, shelter, and fuel—in short, the materials of subsistence and comfort that the laboring classes require. If the thing required be *employment*, we should abandon plows and even spades. To scratch up a rood with the fingers would give more employment than to dig an acre. The word “employment” is merely a concise form of designating toil, trouble, exposure, and fatigue. It is indeed sometimes elliptically used as implying the subsistence which is purchased by enduring it. A poor man complains that he wants *work*. He might work to his heart’s content, and with no man’s leave, if he chose to carry stones from the bottom to the top of a hill. But what he wants is work as a means of obtaining payment. He would be happy to get the payment without the work. Toil, exposure, and fatigue, *per se*, are evils, and the less of them that is required for obtaining a given amount of subsistence and comfort—or, in other words, the greater the facility of obtaining that given amount the better, *cæteris paribus*, will be the condition of the laboring classes, indeed, of all classes in the community.

If a landlord, with £10,000 a year, spends it unproductively, he pays it away to those who furnish the embellishments of his house and grounds, and supply his table, his equipage, and his clothes. Suppose him now to abandon all unproductive expenditure, to confine himself to bare necessities, and to earn them by his own labor. The first consequence would be, that those among whom he previously spent his £10,000 a year would lose him as an employer; and beyond this the theory in question sees nothing. But what would he do with the £10,000 which he would still annually receive? No one supposes that he would lock it up in a box, or bury it in his garden. Whether productively or unproductively, it still must be spent. If spent by himself, as by the supposition it would be spent productively, it must increase, and every year still further increase, the whole fund applicable to the use of the rest of the community. If not spent by himself, it must be lent, as is done by a miser of the present day, to some other person, and by that person it must be spent productively or unproductively. [Thus it appears that] every man must spend his income;³⁶ and the less he spends on himself, the more remains for the rest of the world.* ⁵⁷

NOTES ON PART II

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¹ [Part I, Chapter I, section 5.]

² [Among Senior's papers there is an interesting letter (M¹), dated December 9, 1814, which contains the following observation: "I have not seen much of life, but that *money is the sinews of happiness* every year's, every month's, and every week's, and every day's, and every hour's experience convinces me—at least to those who are capable of enjoying it."

This deep impression produced by bitter personal experience seems to have been the germ of the idea which ultimately became the central thought of the author's economic system. *Money is the sinews of happiness!* But as every one likes to be happy, and happiness consists in the gratification of our wants, it follows that the possession of the means whereby this goal may be attained must be an object the desire for which is *universal*.

The proposition with regard to the *universal desire for wealth*, although for the first time formally stated and developed by Senior, owes its origin to the founder of our science. "The principle which prompts to save," says Adam Smith, "is the *desire of bettering our condition*, a desire which, though generally calm and dispassionate, *comes with us from the womb, and never leaves us till we go into the grave*. In the whole interval which separates those two moments there is scarce perhaps a single instant in which any man is so perfectly and completely satisfied with his situation as to be without any wish of alteration or improvement of any kind. *An augmentation of fortune is the means by which the greater part of men propose and wish to better their condition.*" *The Wealth of Nations* (Thorold Rogers' ed.), I, 344.

This proposition has been regarded by some writers as a worthless abstraction. Thus according to Cliffe Leslie—"The desire of wealth is a general name for a great variety of wants, desires, and sentiments, widely differing in their economical character and effect, undergoing fundamental continuity in others. . . . It includes a love of pictures, toys, jewelry, plate, furniture, clothing, opium, soap, Bibles, brandy . . . a love of eating and drinking . . . of literature and science . . . of charity, sensuality, cruelty, and power; of horses and dogs. It expresses sometimes a desire for the comforts of an old bachelor, and sometimes an inclination for matrimony; and when it takes the latter direction, it means with one young lady love in a cottage, and with another a palace without love; in one man it is fortune-hunting—in another, a disinterested attachment to Miss Aurora Penniless. . . . So all the needs, appetites, passions, tastes, aims, and ideas which the various things comprehended in the word 'wealth' satisfy, are lumped together in political economy as a principle of human nature, which is the source of industry and the moving principle of the economic world. . . . After all the reproach cast on the Mercantile school, modern economists have themselves lapsed into the error they have imputed to it." (*Essays in Political Economy*, pp. 3, 4, and 167.)

This is all very ingenious and interesting, but it must be remembered that all the different things which Leslie so vividly describes are, to quote his own

language, "*alike in one respect—namely, that they are all to be had for money, and are not to be had without it.*" (*Ibid.*, p. 2.) It is this *general purchasing power of money* that stimulates the passion for riches, and that is what Senior meant by "the desire of wealth." As the reader will note, the author admits that pecuniary interest does not explain all the phenomena of economic life. But far from being a useless abstraction it is one of the most powerful motives with which the economist has to reckon. It is doubtful indeed whether Leslie himself really meant to discard entirely the love of riches as a motive power to industry. In all probability he must have meant to say that, in its origin, the desire for wealth is a most complex psychological phenomenon and not so simple a conception as he understood the older economists to have thought.]

³ [The doctrine regarding the unlimited variety of human wants, which Senior regards as the cornerstone of the science of wealth, has been the target of attack from all quarters. Time there was when economists of repute, such as Malthus and Sismondi, entertained serious doubts as to whether the wants of mankind could keep pace with the steady increase in the production of commodities. Like medieval monks seeing the end of the world and preaching of kingdom-come, these false prophets shuddered at the prospects of general over-production or universal glut. In fact, Senior's proposition with regard to the universal desire for wealth was originally intended to offset the pernicious influence of the popular theory of crises and universal gluts. The author tried to show that "the desires of men are practically insatiable, and that the whole world may continue to improve and exercise the powers of production without any fear that exchanges may stagnate from general superabundance" (*Lo*³, 181).

The popular theory respecting the limits of human requirements is intimately connected with the attitude of the poorer classes toward machinery and all improvements in general. The following is an illustration of the widespread influence of these doctrines:

While traveling in Ireland in 1858 Senior had occasion to visit certain model schools, where he took pleasure in testing the efficiency of the different systems of education. On one occasion the schoolmaster asked Senior to put some questions in political economy, and suggested "the effects of machinery" (*J*⁴, II, 133).

Senior asked them, "What would be the effect on wages if every man had four pairs of hands?" The students answered, "To lower them." "If I mean by wages," Senior then asked, "not money, but the commodities consumed by the laborer, would your answer be the same?" "Yes," was the reply, "because too many things would be made, things for which there would be no demand." At this moment the master interceded. "I am afraid," he said, "that you are beyond their depth." To which Senior retorted: "I see that I am; but the question which you suggested, the effect of machinery, can be solved only by going down to the very bottom of political economy."

On another occasion he asked a similar question (*J*⁴, II, 147). "What would be the consequence of every man's being able to do four times as much as he can now?" "To make all the working people poor," it was answered, "for there would be no demand for their work." "Would not," he said, "the things which they consumed be much more abundant?" "Perhaps so," came the response, "but they would have no money to buy them." "Why so?" "Be-

cause rich people have enough now, and would employ only one-fourth of them."

Commenting on what the students had to say with regard to the effects of machinery on wages Senior remarked, "This must be the obvious opinion, for I have always met with it. *The poor seem to be unaware of the infinite variety and extent of men's wants.*"]

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⁴ [Cf. Part IV, Chapter IV, section 4; and Part X, Chapter I, section 1.]

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⁵ [In this connection it may be of interest to note some observations by Dr. Samuel Johnson as they have come down to us through his faithful biographer. In discussing Rousseau's views on the inequality of mankind, a certain Mr. Dempster observed that "the advantages of fortune and rank were nothing to a wise man, who ought to value only merit." This remark prompted Dr. Johnson to make the following comments:

"If man were a savage, living in the woods by himself, this might be true; but in civilized society we all depend upon each other, and our happiness is very much owing to the good opinion of mankind. . . . In civilized society, *external advantages make us more respected*. A man with a good coat upon his back meets with a better reception than he who has a bad one. Sir, you may analyze this, and say, what is there in it? But that will avail you nothing, for it is a part of a general system. . . . In civilized society, *personal merit will not serve you as much as money will*. Sir, you may make the experiment. Go into the street and give one man a lecture on morality, and another a shilling, and see which will respect you most.

"If you wish only to support nature, Sir William Petty fixes your allowance at three pounds a year; but as times are much altered, let us call it six pounds. This sum will fill your belly, shelter you from the weather, and even get you a strong lasting coat, supposing it to be made of good bull's hide. Now, sir, all beyond this is artificial, and is desired in order to obtain a greater degree of respect from our fellow-creatures. And, sir, if six hundred pounds a year procure a man more consequence, and, of course, more happiness than six pounds a year, the same proportion will hold as to six thousand, and so on, as far as opulence can be carried. Perhaps he who has a large fortune may not be so happy as he who has a small one; but that must proceed from other causes than from his having the large fortune; for, *cæteris paribus*, he who is rich in a civilized society, must be happier than he who is poor; as riches, if properly used (and it is a man's own fault if they are not), must be productive of the highest advantage. Money, to be sure, of itself, is of no use; for its only use is to part with it. . . .

"Sir, there is nothing for which you may not muster up more plausible arguments, than those which are urged against wealth and other external advantages. . . . When I was running about this town a very poor fellow, I was a great arguer for the advantages of poverty; but I was, at the same time, very sorry to be poor. Sir, all the arguments which are brought to represent poverty as no evil, show it to be evidently a great evil. You never find people laboring to convince you that you may live very happily upon a plentiful fortune." James Boswell, *Life of Samuel Johnson*, Volume I, pages 343-5.]

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⁶ [The old House of Commons was destroyed by fire in 1834.]

⁷ [Senior's visit to Cassia on December 23, 1857, is described as follows: "I rode to Phyle, through the long defile which leads from Attica to Boeotia . . .

"Some foundations of walls, formed of large quarried stones, uncemented, are all that remains of a considerable town, perhaps, Acharnæ, which supplied a tenth of the Athenian infantry in the Peloponnesian war. Further on, a small plain at the foot of the pass, is the village of Cassia, covering a large space, but now generally in ruins. Out of about 200 houses, not above twenty seemed to be occupied. Some women, most scantily dressed, were washing at the fountain. One girl wore a headdress so peculiar that I begged her to let me examine it. It consisted of a fez half covered by rows of silver coins. 'This,' said my guide, 'is her dowry. She always wears it, for the double purpose of keeping it safe, and exhibiting herself as a young lady of fortune.'" (J⁹, 278-9.)]

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⁸ ["Who can say," Senior observes (J⁴, I, 27), "where the middle class in Great Britain begins or ends? Every separate employment has within itself a higher, a lower, and an intermediate order. Every individual is striving to reach the step that for the time is immediately above him, and the whole community is in a state of ferment and struggle incompatible with content, and possibly unfavorable to happiness, but eminently productive of wealth, power, and intelligence."

Compare Part V, Chapter III, section 1 and Chapter IV, section 2.]

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⁹ *Pol. B*, Z 16.

¹⁰ [Cf. Part IV, Chapter IV, section 4.]

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¹¹ [See details in Part X, Chapters II, III, and IV.]

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¹² *Poor Inquiry Ireland*, Appendix 9, page 18.

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¹³ [A district in London.]

¹⁴ [The first annual report of the Registrar General covered the year 1838.]

¹⁵ [Cf. Part V, Chapter IV, section 2.]

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¹⁶ *Fourth Report of Poor Law Commissioners*, Appendix, page 84.

Page 78.

¹⁷ [*The Wealth of Nations*,] Book V, Chapter I.

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¹⁸ [This section was written in 1847.]

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¹⁹ [Several weeks later Senior called on Ismail Pasha (J⁹, 108-109). The latter inquired what Senior thought most wanted in Turkey.

"Roads and pavements," was the reply.

"Pavements," the Pasha said, "we shall have."

"And I hope," Senior suggested, "that you will diminish or abolish your export duties."

"I hope," he answered, "that we shall abolish them. They aggravate, if they do not create, the unfavorable balance of trade, which is ruining us. We import from Europe all but the rudest manufactures, and our export duties force us to pay for them in specie."

"As respects your import duties," Senior said, "you have nothing to learn. You are the best free traders in the world. I wish that you could give some lessons to France."

"I cannot blame the French," he said. "If they let in your cottons their own would be ruined. The French manufacturer pays twice as much for his steam engine as you do."

"That," Senior retorted, "is because France prohibits English iron."

"And he pays," said the Pasha, "three times as much for his coal."

"That," Senior said, "is because France prohibits English coal."

"Of course she does," replied the Pasha; "she *must* do so. Her own iron works and coal mines could not compete with yours."

The nature of the Pasha's political economy did not induce Senior to prolong the discussion.

Cf. the author's conversation with theirs on the coal question, Part VIII, note 34.]

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²⁰ [A glaring illustration of how the established church of Turkey has interfered with the nation's progress is afforded by the fact that the Sheik-ul-Islam, the religious chief, considered the employment of typewriters in government offices as incompatible with the teachings of the Koran; and, consequently, until very recently all the official correspondence had to be written out in the old-fashioned way. With the separation, however, of the Mohammedan religion from the state after the organization of the Turkish republic, this ridiculous custom was at last discarded.]

²¹ [Friday, November 13, 1857 (J^o, 210).]

²² [Letters of the alphabet are frequently used in Senior's Journals for the purpose of hiding the identity of persons, who objected to have their views published under their real names.]

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²³ [The constitutional law of Turkey.]

²⁴ [A notorious bandit.]

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²⁵ [The use of the past tense would imply that Senior was describing an institution that had already disappeared. This section was written in 1847, but in a conversation with Baron de Billing three years later (May 16, 1850) the author was informed as follows:

"You in England fancy that we have got rid of [the] distinction [between *roturier* and gentleman]. There is not a shadow of its diminution. You are deceived by the familiarity with which the *noblesse* treat the *roturiers*. They treat them so because they know that between them there is an impassable gulf. I will give you an instance. There are two men of great political impor-

tance, friends of yours" (and he mentioned their names): "one is of a respectable but plebeian family, the other's birth is very high. They are intimate friends; their children have been brought up together. It occurred to the *roturier* that a match might be made between two of their children. He was at that time, indeed is now, one of the first men in France; and he thought that his personal rank might supply the place of inherited rank. The noble was sounded, through certain *entremetteurs*. He was as much astonished, or rather shocked, as if it had been proposed to connect his family with that of a shoemaker."

"Money" (the baron added), "has far more influence in France than in England. The Englishman wishes for it in order to spend, the Frenchman in order to save, and the desire of accumulation is a more constant and a more intense stimulus than that of expenditure. Money, too, is more necessary to the bulk of our people than to yours. An Englishman cannot starve—the poor laws prevent that; they offer him, though not on agreeable terms, a better maintenance, a better lodging, warmth, clothing, and food than the French peasant can get, or even the English hard-working laborer. This is one of the reasons of our universal place-hunting. Every one is anxious for a permanent income, however small. This is the reason, too, why our marriages are made so constantly for money. An English commoner, if he does not marry for love, marries for connection. He hopes to rise into a higher circle. A French *roturier* has no such hope. Nothing will place him on a level with a *gentilhomme*" J⁶, I, 247.]

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²⁶ Turgot, *Mémoire sur les Prêts. d'Argent*, Vol. V, p. 263.

²⁷ [Goethe, *Wilhelm Meister*], Book V, Chapter III.

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²⁸ Henry, *History of Great Britain*, Book VI, Chapter VII.

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²⁹ [Aside from emigration which, at best, is merely a temporary expedient. See Part V, Chapter I, section 2; and Chapters VI to VIII.]

³⁰ [Cf. Part V, Chapter V, sections 1 and 3.]

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³¹ Say, *Principes*, Tome III, p. 276.

³² McCulloch, *Principles*, 2d edition, p. 511.

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³³ [Cf. Part III, Chapter III, section 2, last paragraph.]

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³⁴ ["It is not the lackey's fault that his labor is unproductive from a social viewpoint; and indeed the bricklayer's labor is similarly unproductive if so mis-directed by the builder that the structure worked upon collapses before its completion. The embodiment of utility in a material product is not essential. On the other hand, waste of effort is economically, as well as morally, important. Utility, though not a material product, is necessary to the idea of productive consumption. That sort of consumption from which the degree or quantity of utility resulting is nil or inappreciable is unproductive." G. P. Watkins.

The reader's attention is directed in this connection to Part III, Chapter II, section 1; and Chapter III, section 3.]

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²⁵ *Principles*, etc., p. 475.

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²⁶ [*Cf.* Part IV, Chapter IV, section 4; and Part IX, Chapter V, section 4, last two paragraphs.]

PART III
THE PRODUCTION OF WEALTH

CHAPTER I

THE NATURE OF WEALTH

1. *Wealth and Value.* 2. *The Labor Theory of Wealth.* 3. *Private vs. Social Wealth.*

1. Wealth and Value. It may be remarked that I have as yet used the word wealth without defining it. I have done so, because I employ it in its popular sense. [Now, however,] I think it advisable formally to define the term which expresses [the] subject-matter [of this treatise]. And this for two reasons. First, because, in a scientific work, every technical term ought to be defined; and, secondly, because that term has been employed by many of those who have preceded me, in senses differing from that which I adopt.

In ordinary use, and I think it is the most convenient use, *wealth comprehends all those things, and those things only, which, directly or indirectly, are made the subjects of purchase and sale, of letting and hiring.*

For this purpose, they must, in the first place, possess *utility*, or, in other words, be capable of affording pleasure or preventing pain, since no one would purchase or hire anything absolutely useless.* ⁵⁸ Utility,¹ however, denotes no intrinsic quality in the things which we call useful; it merely expresses their relations to the pains and pleasures of mankind. As the susceptibility of pain or pleasure from particular objects is created and modified by causes innumerable, and constantly varying, we find an endless diversity in men's notions of utility—a diversity which is the motive of all exchanges.* ⁵⁹

In the second place, they must be *limited in supply*, since no one would buy anything of which he might acquire as much as he pleased by merely taking possession of it. The water in the open sea is practically unlimited in supply; any one who chooses to go for it, may have as much of it as he pleases. The portion of it which has been brought to London to supply salt-water baths is limited, and cannot be obtained, therefore, without payment.* ⁶⁰

Many things are unlimited in supply for some purposes, and limited for others. The water in a river is in general more than

sufficient for all the domestic purposes for which it can be required; nobody pays, therefore, for permission to take a bucketful. But it is seldom sufficient for all those who may wish to turn their mills with it; they pay, therefore, for that privilege.

It must be further observed, that for economical purposes, the term *limitation in supply* always involves the consideration of the causes by which the existing supply² is limited. The supply of some articles of wealth is limited by insurmountable obstacles. The number of Raphael's pictures, or of Canova's statues, may be diminished, but cannot possibly be increased. There are others of which the supply may be increased to an indefinite extent. Such things may be considered as comparatively limited in supply, in proportion, not to the existing supply of each, but to the force of the obstacles opposed to their respective increase. It is supposed that there is now about forty-five times as much of silver extracted from the mines, and current in Europe, as there is of gold. Human exertion is the only means by which the supply of either can be increased, and they may both be increased by human exertion to an amount of which we do not know the limit. The obstacles, therefore, by which they are each limited in supply, is [are] the amount of human exertion necessary to their respective increase. About sixteen times more exertion is necessary to produce an ounce of gold than an ounce of silver; [in other words,] the obstacle which limits the supply of gold is sixteen times more powerful than that which limits the supply of silver. I consider, therefore, gold as only sixteen times more limited in supply than silver, though the actual weight of silver in Europe is forty-five times as great as that of gold. To take a more familiar example, the number of coats and waistcoats in England is perhaps about equal. The supply of each may be increased by human exertion to an indefinite extent; but it requires about three times as much exertion to produce a coat as to produce a waistcoat. As the obstacle, therefore, which limits the supply of coats is three times as formidable as that which limits the supply of waistcoats, I consider coats three times more limited in supply than waistcoats, though the existing supply of each may perhaps be equal. Whenever, therefore, I apply the words *limited in supply*, as a comparative expression, to those commodities [i. e., articles of wealth—including personal services, "materials," and "instruments"] of which the supply can be increased, I refer to the comparative force of the obstacles which limit the respective supplies of the objects compared.*⁶¹

In the third place, nothing is wealth that is not *capable of appropriation*. Fine weather is useful, and is limited in supply, but it is not wealth, since it cannot be appropriated. Some things are capable of appropriation only under peculiar circumstances. In an extensive, thinly inhabited plain, light and air are incapable of appropriation, every inhabitant may enjoy them equally; but in a town, one house intercepts them from another. A town house, surrounded by an open space, has more of them than one in a street. The possessor of such a house, and of the ground which surrounds it, has practically appropriated its peculiar advantages of light and air; they add to its value, and form, therefore, part of his wealth. He even may sell them without parting with his house, by selling the privilege of erecting buildings which will intercept them.

Fourthly, as is implied by the definition, nothing can be wealth which is not directly or indirectly *transferable*. High birth is agreeable and rare, it may add to the happiness of its possessor; but, as it is absolutely incapable of transfer, it is not part of his wealth. Most of our personal qualities are only indirectly transferable; they are transferable, not in themselves, but embodied in the commodities which their possessor can produce, or in the services which he can render. The skill of a painter is transferable in the form of a commodity, his pictures; the skill of a surgeon in that of a service, the dexterity with which he performs an operation. Such qualities perish by the death of the possessor, or may be impaired or destroyed by disease, or rendered valueless by changes in the customs of the country, which put an end to the demand for their products. Even to the same person, and under the same circumstances in all other respects, they may become wealth, or cease to be wealth, merely in consequence of a change in the social position of their possessor. When Miss Linley became Mrs. Sheridan, her powers of action and song ceased to be wealth. They remained the delight of private societies, but were no longer objects of sale. If Sheridan had condescended to accept an income on such terms, his wife's accomplishments would have enriched him. Subject, however, to these contingencies, personal qualities are wealth, and wealth of the most valuable kind. The amount of the revenue derived from their exercise in England, far exceeds the rental of all its land.

The words wealth and value differ as substance and attribute. All those things, and those things only, which constitute wealth, are valuable. As the meaning of the term *value* has been the subject of long and eager controversy, I shall [in another Part of this

treatise], consider the different significations which have been given to it. It is enough to say at present that I use it in its popular acceptation, as signifying in anything *the quality which fits it to be given and received in exchange, or, in other words, to be let or sold, hired or purchased*.* ⁶²

2. The Labor Theory of Wealth. I have said that my definition of wealth differs from that which has been adopted by many of my predecessors. Some political economists extend the term to all the objects of human desire; others restrict it to what they have called material products; and others to the things which cannot be acquired or produced without labor.

The objections to the first definition are obvious. If wealth be the subject of political economy, and wealth include all that man desires, political economy, whether a science or an art, is the science or the art which treats of human happiness ³—a subject, as I have already remarked, too extensive to be included in a single treatise. The second, that which confines wealth to material objects, is more plausible. It includes all visible wealth, it includes all wealth which is capable of direct and complete sale. The things which it excludes are mere objects of the intellect. They may be shared, but cannot be completely transferred, since the proprietor, though he may impart them, cannot divest himself of them; they may produce permanent effects, but perish themselves with the individual mind of which they are qualities. But as they obey, in other respects [as we shall see later ⁴], the same laws as material wealth, are obtained by the same means, and owe their value to the same causes, I think their exclusion a fatal objection to a definition of wealth.

The definition which confines wealth to the things which cannot be acquired or produced without labor,⁵ differs little from mine, which confines it to things limited in supply. Whatever must be obtained by labor is necessarily limited in supply, the supply of labor itself being limited; and, on the other hand, there are, in fact, scarcely any, if there be any, commodities limited in supply and capable of transfer, which can be obtained without some labor. So that wealth is always found subject to both these incidents. Nor does value appear to depend on either incident exclusively. A quarter of corn from the best, and one from the worst land, of equal goodness, sell in the same market at the same price, though one may have cost three times as much labor as the other. The pictures of Hans Hemling are far more limited in supply than those of Raphael, and yet they sell for much less.

We can separate, however, the two qualities in our minds. We can suppose a commodity useful and transferable to be limited in supply, but that supply to be gratuitously afforded by nature. About 1,980,000 lbs. weight of silver is supposed to be now annually supplied. Now, if precisely the same quantity of pure silver as is now produced daily in each refining house, were every day to be supernaturally deposited on a table in the refining house, and all other sources of supply were to cease, silver would continue to be limited in supply just as it is now, but would no longer be procured by labor. Is there any reason for supposing that its value would alter? If its value would remain the same, it follows that it depends on limitation of supply, and that limitation of supply, not the necessity of labor, is the differentia which constitutes wealth. An unbolted copy of an early printed book is worth, perhaps, ten times as much as a copy which has been fitted to be read by cutting open its leaves. Because it has cost more labor? No: it has cost rather less. Because it is more readable? No: it is useless for the purpose of reading. Simply because such copies are more limited in supply.* ⁶³

3. Private vs. Social Wealth. It follows, from [my] definition of wealth, that in a community enjoying perfect abundance, there would be no wealth. If every object of desire could be procured by a wish, nothing would have value, and nothing would be exchanged. It follows, also, that it is possible to conceive at least a temporary diminution of the wealth of a community occasioned by an increase of their means of enjoyment. This would be the immediate consequence of any cause which should occasion the supply of any useful article to change from limited to unlimited.

Thus, if the climate of England could suddenly be changed to that of Bogota, and the warmth which we extract imperfectly and expensively from fuel were supplied by the sun, fuel would cease to be useful, except as one of the productive instruments employed by art. We should want no more grates or chimney pieces in our sitting rooms. What had previously been a considerable amount of property in the fixtures of houses, in stock in trade, and materials, would become valueless. Coals would sink in price; the most expensive mines would be abandoned; those which were retained would afford smaller rents. The proprietors and tradesmen specially affected by the change would lose not only in wealth, but in the means of enjoyment. The owner of a mine whose rent fell from £20,000 a year to £10,000, would not be compensated by being

saved the expense of fuel in every room except his kitchen. On the other hand, persons without fireplaces or coal cellars of their own, would lose nothing, and the rest of the world would lose only in the value of their grates, chimney pieces, and stocks of coal; and all would gain in enjoyment by being able to devote to other purposes the money which they previously paid for artificial warmth.

Still for a time there would be less wealth. That time, indeed, would be short; the capital and the labor previously devoted to warming our apartments, would be diverted to the production of new commodities. The cheapness of coal would increase the supply of manufactured articles, and there would then be as much wealth as there was before the change—probably more, and certainly more enjoyment. It is probable that salt forms a smaller part of the wealth of England than of Hindostan, though every Englishman has twenty times as much of it as every Hindu. The Englishman is allowed to use freely the abundant supply offered by nature. In Hindostan there is a natural scarcity, aggravated tenfold by the government.

We may conceive a case in which unlimited abundance would destroy not only the value, but the utility of a whole class of commodities—would prevent them not merely from being objects of exchange, but even from being objects of desire. This would be the case as to all the commodities whose only utility is to be a means of displaying wealth. If emeralds were suddenly to become as abundant as pebbles, they could be no longer used as ornaments; and if no other use could be made of them—and I am not aware of any—they would be valueless. All their possessors, at the time of the change, would find themselves poorer, and neither they nor any one else would be compensated by any increased means of enjoyment. It would be a mere destruction of wealth.

It may be as well to remark, that things may be wealth to individuals without forming part of the wealth of the community to which those individuals belong. This is the case with respect to almost all the wealth created by an artificial limitation of supply. The monopolies with which Elizabeth rewarded her favorites were wealth to them, but diminished the wealth of the rest of the community. The same may be said of a patent right, or of the secrecy of a manufacturing process. The process itself, which is protected by the patent or by the secrecy, is part of the wealth of the community, since it enables them to have more or better commodities; but the monopoly granted by the patent, or guarded by the secrecy,

is wealth only to its owner. As soon as the patent terminates, or the secret is divulged, the wealth of the community is increased by the increased abundance of the commodities to the production of which every one may now apply the process.

Again, the national debt is wealth to the proprietors of stock, but as the sum received in dividends is paid in taxes, it cannot form a part of the wealth of the nation. If, indeed, those two sums precisely coincided, if there were no expenses of collection, and if taxes did not interfere with the production of wealth, the national debt would not diminish the national wealth, though it could not augment it. It would be a mere matter of distribution. But the expense of collecting the national revenue, and the interference of taxation with production, are so much pure loss; and by the amount of these two sources of expense and loss, we should be richer if the national debt were repudiated.

The wealth which consists merely of a right or credit on the part of A with a corresponding duty or debt on the part of B, is not considered by the political economist. He deals with the things which are the subjects of the right or of the credit, not with the claims or the liabilities which may affect them. In fact, the credit amounts merely to this, that B has in his hands a part of the property of A.* 64

CHAPTER II

THE PRODUCTS OF INDUSTRY

1. The Meaning of Production. 2. Kinds of Productive Operations. 3. Classification of Industries. 4. "Commodities," "Materials," and "Instruments."

1. The Meaning of Production. I now proceed to explain the sense in which I use the word production, and its relatives, producer and product.

It is scarcely necessary to state that creation is the attribute only of God, and that all which man, or any other agent of which we have experience, can effect, is to alter the existing condition of matter or of mind. Every human act is the effecting such an alteration. But as political economy treats only of wealth, and therefore only of those alterations which affect wealth, a large portion of the acts of man lie without its cognizance. The child who heaps up the sand of the seashore into a castle, and the child who kicks it down, each occasions effects the same in kind as those produced by the man who builds or pulls down a palace. But as the act of the child has no influence on wealth, it is not a producer.

Nor, of course, is every act which affects wealth productive. Some, such as those of the incendiary, are purely destructive. Others, such as those of the robber or the almsgiver, are merely distributive. They cause wealth to change hands, but do not increase it.

Even the acts which increase wealth cannot all, in the ordinary use of language, be termed productive. A laboring man is ill; his recovery will increase his own wealth, by restoring to him the bodily and mental powers which enabled him to earn his subsistence, and, by supplying an additional workman will increase the wealth of the society of which he is a member. To effect this recovery, the miner must have extracted mercury from the earth, the merchant must have transported it to the place of consumption, the chemist must have converted it into calomel, and the patient must swallow it. Of these four acts, the last is the most important. The first three are merely subsidiary to it. And yet, though every one would allow the exertions of the miner, of the merchant, and of the chemist to be productive, it would sound absurd if we were to say that a

man produces by taking a dose of physic. As well might he be called a producer in respect of any other act which is conducive to health.

Nor, on the other hand, can we restrict the term production to those acts which are performed solely for the purpose of exchange. The farmer is a producer as much in respect of that portion of his harvest which he consumes, as in respect of that which he sells.

I propose, [therefore], to define *production* as *the occasioning an alteration in the existing condition of matter or of mind, for the occasioning of which alteration, or for its results, something may be obtained in exchange*. Such an alteration is a *product*.*⁶⁵

This definition excludes nearly all the acts which are neither productive of pleasure nor preventive of pain, since such acts are seldom susceptible of remuneration. It excludes, for the same reason, the acts which are agreeable or useful only to the individual who performs them, such as taking exercise or medicine. It includes the products which, though not produced for the purpose of exchange, are yet exchangeable—such as the potatoes which a farmer grows for his own consumption; and those which, though they eventually become useless, are yet paid for, such as the settlements prepared for a marriage which does not take place or the earthworks of a railway which will never be completed.*⁶⁶

I have said that the test of an act being or not being productive is, its being in itself or in its results capable of sale: and that this capability proves it to be, or at least to be supposed to be, useful, that is to say, productive of pleasure or preventive of pain; since no one would purchase what he knew to be useless. It is not essential however to the definition of a product that it should be a permanent addition to the wealth of its purchaser. Many products are of almost evanescent duration: a firework is destroyed as soon as it is used; the services of an actor or of a valet perish as they are performed. But no Frenchman is happy without a theater; no English gentleman could bear to live without a servant. Rather than perform for himself the household drudgery for which we rely on servants, he would sacrifice half his income. Results which are necessary to the full enjoyment of wealth are themselves wealth, though from their transitory nature they are incapable of accumulation, and must be renewed from day to day or from hour to hour. They resemble a river, which is perhaps the most permanent of objects, though the water of which it is constituted is never for a second the same.

Nor is it essential to a product that it should be capable of effecting the purpose for which it was designed; or indeed always that it should be capable of effecting any useful purpose whatever. The Thames tunnel has not effected its purpose. It does not really facilitate the traffic between Essex and Kent. But the workmen employed on it were producers: they performed services for which they were entitled to be paid and were paid. And they would equally have been paid, and would therefore have equally been producers, if the tunnel, when it was half finished, had been carried away by the tide.

It is to meet cases of this kind that I have admitted that an act may sometimes be productive, though its result may be utterly useless. This occurs when it is performed in pursuance of a contract, and subsequent circumstances, or error on the part of the person who gave the order, render its execution useless. A settlement prepared in contemplation of a marriage which is broken off is a mere waste of thought, ink, and parchment; but the lawyer who drew it and the clerks who engrossed it must be paid, and therefore as respects *them* it is a product. So a house so built as to be unsafe to enter is a product, if the builder has faithfully obeyed the orders of his employer. A large portion of the commodities offered for sale or for hiring are not worth the expense of making them; they are products, however, though the wealth of the community might have been greater if they had never existed.

There are, indeed, many cases in which the question of product or not product depends on the contract between the parties. If I agree with an architect to build me a house, and he draws plans for the guidance of his workmen, but fails in completing his contract, those plans are not products, since he can claim no remuneration for them. But if I employ him merely to draw plans, those plans are a product, since he is entitled to be paid for them whether I use them or not.

It appears in some cases, at first sight, to be a question whether the act performed, or the consequence of that act, is more properly to be termed the product. Whether, for instance, the product of a preacher is his sermon, or the effect of that sermon on his congregation; whether that of a counsel is his speech, or the influence of that speech on the judge. With respect to commodities the answer is obvious. The product of a tailor is the coat, not the warmth which that coat affords. The product of a builder is a house, not the comfort of its inhabitants. Were it otherwise, the productive-

ness of a workman would depend on the conduct of his customers, and the builder must be considered productive whenever the house was occupied, and unproductive whenever it was vacant. And the same rule applies to services. The speech of a counsel is not the less a product because the negligence, or ignorance, or corruption of the judge prevented his listening to it. The decision of a judge is not the less a product because a despot has refused to carry it into effect. The advice of a physician is a product, though the patient neglect to follow it.

At the same time it must be admitted that in estimating the value of a product, we always look to its consequences. A well-arranged and an ill-arranged house are both products, but the latter is of course the less valuable. A counsel who is sure to be listened to is paid ten times, perhaps a hundred times, as much as one whose choice of arguments or mode of expression are not likely to do justice to his case. All that I mean to say is, that the inferior speech is a product, though a less valuable one. It ceases to be a product only if it be so bad as to be utterly useless, and therefore unfit for remuneration.

It follows that the alteration which one man, a teacher for instance, or a counsel, occasions on the mind of another, however useful, is not, in economical language, the product of the counsel or teacher. Such an alteration can be effected only by means of acts addressed to the hearing or to the sight, and, as we have seen, those acts themselves, not the consequences of those acts, are the product. In some cases, however, the alteration which a man occasions in his own person may be correctly termed a product. We have seen that professional knowledge is wealth. The attention, therefore, and meditation by which that knowledge is to be acquired cannot be considered unproductive. They are to the mind what draining, plowing, and manuring are to the soil. They produce in it an alteration which fits it to produce exchangeable results. It follows that when a lecture is permanently useful, each party, the pupil as well as the professor, is a producer. The product of the professor is his lecture. The product of the pupil is the alteration in his own mind which he effects by listening to the lecture, and by meditating on its contents. This use of the word product must, however, be confined to the cases in which the exertion is made for the express purpose of increasing or maintaining the productive power of the person who makes it—to the acts of which *wealth*, not pleasure, or the prevention of pain, is the object.

For if every act by which a man increases or maintains his power of body or of mind were to be called productive, we must apply that term to eating, drinking, and sleeping. *⁶⁷

2. Kinds of Productive Operations. Having explained the sense in which I use the word production, I now proceed to consider the modes in which production may be effected. They may be conveniently divided into two classes: those in which the producer operates solely on himself, and those in which he modifies some foreign substance. The latter class may be subdivided into (a) chemical changes, (b) mechanical changes, and (c) commercial changes, [or] mere changes of place. *⁶⁸

A. Personal Utilities or Services. The first class includes all those acts which consist in the utterance of words, and I think I may add, all those which consist in mere writing. For as there is no essential difference, as respects the agent, between the act of a man who gives a verbal or a written order, between the advice which a physician embodies in a prescription, and that which he gives in conversation with his patient, between the oral lecture and the written treatise, I think myself justified in regarding rather the substance than the form, and in including in the same class all those acts which are mere expressions of thought or will, whether the will or the thought be signified by audible or by visible signs, by words, or by characters. So extended, this class includes the services performed by the ruler, the lawgiver, the senator, the judge, the advocate, and the physician. It includes those performed by the philosopher, the historian, and the poet. It includes the exhibitions of the actor and of the singer, the duties of the watchman and of the sentinel. It includes the acts of the student, so far as they give to his mind professional knowledge or professional skill. These may be called personal changes, or services.

B. Chemical Utilities. Secondly, an act by which the producer modifies some foreign substance may alter its constituent parts, as when a metallurgist by adding carbon changes iron into steel, or a chemist by bringing into contact soda and silex produces glass. These are all chemical changes. Out of two or more substances a new one arises, with different elements and different qualities from those of any one of the substances out of which it has been compounded.

C. Mechanical Utilities. Thirdly, without altering the elementary constituents of a substance, he may alter its form, or may unite things previously separated, or separate things formerly

united. Thus a modeler molds a shapeless piece of clay into a bust; a sculptor by removing the superfluous marble extricates a statue from the block; a spinner draws out and twists a flock of cotton wool into a thread; a weaver arranges the threads in the form of a web; a sawyer cuts an oak into planks; a shipbuilder unites timber, oakum, hemp, tar, iron, and copper in the form of a ship. These are all mechanical changes. Nothing is altered in substance, but either the same substance receives a different form, or two or more substances are brought into contact and retained in cohesion.

D. Commercial Utilities. Fourthly, without altering the elementary or the aggregate forms of matter, a producer may change its place. He transports ice from Wenham Lake, where it is valueless, to Calcutta, where it is the most prized of luxuries. He carries cotton wool from the purely agricultural plains of Georgia to the mills of New England, Lancashire, and Normandy. He takes the calico from the factory in which it has been spun and woven, and clothes the negro and the Malay with the produce of the looms of Manchester. With every change of place the ice, the cotton wool, and the calico becomes, for economical purposes, a different commodity, and therefore a different product, possessing a different value, desired by a different class of customers, and often applicable to a different use. The purposes for which the quicksilver of Almaden is used in Spain are totally different from those to which it is applied when it has been transported to Mexico. These may be called commercial changes.*⁶⁹

3. Classification of Industries. There are few producers who do not from time to time exercise every one of these four modes of production. The farmer produces a chemical change when he converts grass into hay; a mechanical change when he collects the hay into a rick, and again when he cuts it out of the rick and divides it into trusses; a commercial one when he takes it to market; and he employs only his own person when he bargains with the purchaser. A housemaid is a chemist when she lights a fire, a mechanic when she makes a bed, and she performs a personal service when she carries a message. Still however it is generally found that a producer has more affinity for one of these modes of production than for the others: so much so, that human industry may be not inconveniently divided into four great branches, corresponding with the four great modes of production.

A. The Professions. The first branch, in which the chief business of the producer is to operate on himself, comprises all profes-

sions, including, what is almost everywhere the most numerous filled profession, the service of the state. And if we class among the producers of services, and therefore exclude from the producers of commodities, those who concur only indirectly ⁶ in production, as ordering or superintending it, it includes all the higher departments of every mode of production.

The direct production of commodities has generally been divided into three great branches, agriculture, manufactures, and commerce; and each of these is peculiarly connected with one of the three productive acts which I have described.

B. Agriculture. The changes produced by the agriculturist are almost all of them chemical. By combining a few simple elements he produces, or, to speak more correctly, he occasions the production of all the cultivated vegetables, and of all the domestic animals. He converts carbon, oxygen, and hydrogen into clover, and that clover into beef and mutton. He trenches the southern side of a sandy hill, inserts a vine shoot, adds manure and water, and produces grapes; he squeezes out their juice, allows it to ferment, and it is wine.

C. Manufactures. The operations of the manufacturer involve chemical changes more frequently than those of the agriculturist do mechanical changes. Still in manufactures the mechanical changes largely predominate. The only chemical change necessary for the erection of a house is the conversion of lime into mortar; all the rest is the mere aggregation of materials, without any change except of form and disposition. Shipbuilding is purely mechanical—so are all the changes which a bale of cotton suffers until it is sent, in the form of cloth, to the bleacher and the dyer. In fact, the most exclusively chemical manufactures are those which from their simplicity require little division of labor—the productions of the domestic arts of baking, brewing, and cooking.

D. Commerce. It is scarcely necessary to state formally, that all the changes effected by commerce are mere changes of place. Even the very last change of place which a commodity undergoes, that which puts it in the hands of its consumer, is often the one that is most dearly purchased. It costs more to take a pipe of port from the docks to a college cellar, than to transport it from Oporto to London. A large portion of the internal commerce of this country consists in the removal of commodities from the farm or from the manufactory in which they have been prepared for consumption, to the market or the shop in which they are to be exposed for sale.

The want of this internal commerce in Ireland was one of the causes which rendered the famine so destructive. The Irish, as is the case with all nations in a low state of civilization, produce more for the purpose of consumption than of sale. The cottier hires an acre of land from the farmer, pays for it by so many days of labor, and feeds his family with its crop of potatoes. There are extensive districts without shops, except perhaps a store for the sale of coarse clothing, whisky, and tobacco. When the vast supplies of flour and Indian meal arrived from England at the outports, they were stopped for want of the means of transport to the depots in the interior of the country; and, when they reached those depots, for want of retailers to carry them to the villages, or to distribute them among the people. Many hundreds perished for want of food which had reached their country, perhaps even their neighborhood, but which there were no means of conveying to their cottages.* 70

4. "**Commodities,**" "**Materials,**" and "**Instruments.**" [My classification of products into personal, chemical, mechanical and commercial changes, has been with reference to] the *means* by which they are occasioned. [When considered, however, with respect to] the *purposes* to which they are applicable, [the three latter products] may be divided, by a cross-division, into commodities, materials, and instruments.

Commodities are the things which are consumed solely or principally for the purpose of enjoyment or of ease, to produce pleasure or to prevent pain.

Materials are the substances which are capable of being worked up into commodities or instruments.

Instruments are the things which are employed in converting materials into commodities or into other instruments. Except in the hands of a dealer in instruments, they are not themselves matter of exchange. They are worn out without ever becoming a part of the exchangeable result, which they have assisted in producing.

Commodities are $T\epsilon\lambda\eta$, they are made or purchased and consumed for their own sakes. Materials and instruments are means—they are made or purchased and consumed in order to produce commodities.

Many things may be used indifferently as either commodities, materials, or instruments. Thus a palace may be inhabited by its owner, which is using it as a commodity; or pulled down and its fragments used to construct fresh buildings, which is turning it into

materials; or it may be converted into a manufactory, in which case it becomes an instrument.*⁷¹ [To give another illustration], a bunch of grapes may be eaten, which is using it as a commodity; or its juice may be turned into wine, which is using it as a material. The wine may be drunk, or may be used as a material, by keeping it in a cask till it has been improved by time. It may then be drunk from the cask as a commodity, or bottled as a material. So a ship may be used as a pleasure yacht, in which case it is a commodity, or as a merchant vessel, in which case it is an instrument.

When William Rufus laid waste the lands of thirty villages and formed the New Forest he converted those lands from instruments into one great commodity. There is probably now in use gold which has served alternately as an instrument, a material, and a commodity for thousands of years—sometimes in coin, as an instrument of exchange, sometimes in the hands of the coiner or of the jeweler as a material, and sometimes in a ring or chain as a commodity.*⁷²

In general, the use of anything as a material implies its undergoing a chemical or a mechanical change, and, therefore, the destruction of its utility as a commodity. Precious stones, when used as parts of ornaments, and gold and silver are the only things which occur to me as capable of constant change without loss.

*The same his ancient personage to deck
Her great-great-grandsire wore about his neck.
In three real rings, which after, melted down
Formed a vast buckle for his widow's gown.
Her infant grandame's whistle next it grew,
The bells she jingled and the whistle blew.
Then in a bodkin graced her mother's hairs,
Which long she wore, and now Belinda wears.*

The same thing may often be used alternately as a commodity and as an instrument without inconvenience. Our grandfathers always put their carriage horses to the plow.*⁷³

The comparative utility of commodities depends partly on the intensity of the pleasure which they afford, and partly on their durability.

A magnificent firework probably gives more intense pleasure than is given at any one moment by a fine picture or statue. But the firework is exhausted in a few minutes; the picture may last for centuries; the statue forever.

Nearly the same causes determine the comparative utility of

instruments. It depends partly on their efficiency and partly on their durability.

It is to be observed, however, that the durability, both of commodities and of instruments, is of different kinds according as their consumption is gradual or sudden. A bowl of milk is of instantaneous consumption; it perishes the instant that it is made use of, and spoils in a day or two if unused. A building is of gradual consumption. Every day deteriorates it, but by constant renewal it can be kept serviceable for an indefinite period. A diamond will last forever, without repair and without deterioration.

Commodities or instruments which, though of rapid consumption, do not spoil by keeping may be made practically durable by merely augmenting their quantity. George the Fourth is said to have left at Brighton 200 butts of sherry, or about 10,000 dozens. In any ordinary household such a provision would have lasted for centuries. So a fortress may be provided with ammunition for years, though the consumption of ammunition, when it does occur, is instantaneous.

The comparative utility of materials depends partly on the utility of the commodities or instruments of which they are the materials, partly on the facility or difficulty with which they can be converted into those commodities or instruments, and partly on the time which that conversion takes. A high-bred foal, if he survive the accidents of rearing and training, may become a horse worth three thousand guineas. A three-year-old cart horse will never grow to be worth more than £50. With the young cart horse, however, there is scarcely any risk or difficulty. It is almost certain that in a year's time he will be a serviceable instrument. The racing foal will certainly cost much in trouble and anxiety for three or four years, and probably turn out ill at last. Of the two the cart horse may be the more valuable material. A young oak will grow into a more useful commodity than a young poplar; but the one will be fit for use in thirty years, the other not before one hundred years. The deep lands of the valley, when properly cleared, drained, and plowed will become a more useful instrument than the light soil of the hillside: but the latter is ready for use; the former perhaps cannot be rendered available except by the labor of one hundred men for one year, or of ten men for ten years.*⁷⁴

[The significance of these remarks will be made clearer when we come to consider the nature of abstinence⁷ and the use of capital.]

CHAPTER III

DIRECT AND INDIRECT PRODUCTION: PLANNING AND DOING

1. Direct and Indirect Producers. 2. Productive and Unproductive Laborers. 3. Material and Immaterial Products.

1. Direct and Indirect Producers. In the last chapter I alluded slightly to the distinction between direct and indirect, or, to use an equivalent expression, between immediate and mediate production.

In some cases the producer causes, without the intervention of any other human agent, the alteration in the existing condition of matter or of mind which I have termed a product. In such cases I call him a *direct*, or immediate producer. In other cases he causes that alteration by employing some other human agent. I then call him an *indirect*⁸, or mediate producer.

In many of the highest, and in all of the lowest branches of industry, the production is direct. An actor, an advocate, a physician, or a judge employs only his own person. As soon as the part has been acted, the speech made, the advice given, or the decision pronounced, the product is complete without the intervention of a third person. The case is the same as to the common soldier, the common sailor, and the common laborer. No one of them delegates to another the performance of the labor by which he lives—the performance of the acts which in themselves, or in the commodities which they produce, are matters of exchange.

In other cases, less numerous, but more important, the production is indirect. The producer effects, not in his own person but through the agency of others, the change in the existing condition of matter [or of mind] which constitutes production. A merchant does not with his own hands transport ice from America to India. He merely directs other persons to perform the numerous services of which that transport is the ultimate result. The Duke of Bridgewater to whose self-denial, enterprise and skill Manchester and Liverpool owed the canal, which for many years was one of the main sources of their wealth, never turned up a sod himself. Neither

Hannibal nor Napoleon nor the Duke of Wellington ever struck down an enemy.* ⁷⁵

In science, in literature, in medicine, in the fine arts, (with the exception of architecture) and in oratory, which is nearly allied to them, the most eminent producers generally operate directly. In government, in war, in commerce, in architecture, and in the useful arts as distinguished from the fine arts, the most eminent men operate indirectly.* ⁷⁶

The distinction between direct and indirect production though sometimes, as in the cases which I have mentioned, marked and material is sometimes slight or unimportant. An author sells his manuscript. The manuscript is then his product, and he is a direct producer. He publishes it at his own expense. Not only the manuscript but the published book is then his product. And though a direct producer of the manuscript, he is an indirect producer of the book. He produces that through the intervention of the paper maker, the compositor, the printer, and the binder.

Indirect production is, in a great measure, the result of civilization. When carried to a considerable extent it requires from the agents employed by the indirect producer an amount of fidelity, obedience, and intelligence which is the slow result of moral and intellectual cultivation. The Roman *mercator* did not act from his countinghouse. He went with his goods to their places of sale, for he could trust no one else to manage the transport, to receive the purchase money, or to reinvest it in a return cargo. Even now the merchant of Africa and of Asia himself accompanies the caravan.

Great works planned and effected by private persons for the sake of profit are a modern invention. Not because the power to execute them was wanting. That power is great and active in semibarbarous times. No modern works rival the pyramids and temples of Egypt or the wall of China. But to erect them required only a despotic sovereign and an obedient people. If they cost five times or ten times as much labor or as much materials as was estimated—if the labor or the materials were wastefully employed or even from time to time fraudulently misapplied—the only evil was delay. The temple which ought to have been completed in ten years took perhaps fifty or one hundred. But works which are to be profitable must, to a certain extent, agree with the calculations on which they have been begun. The expense and the time may indeed be doubled—perhaps may be trebled—and the

enterprise still be profitable. The returns may exceed anticipation as much as the advances. This has been the case with many railways.

But there is a limit to this. A railway estimated to cost five million and to be ready in five years would not be profitable if its construction cost fifty millions of money and fifty years of time. Now, if there be added to the inevitable danger of unforeseen difficulties the further danger of untrustworthy agents, the risk deters all private enterprise. Such undertakings first began a couple of centuries ago in the comparatively moral and educated populations of Holland and England; they have been copied in that part of America which borrowed its institutions from England. They are gradually arising on the continent of Europe. The Asiatic and the African characters seem totally unfit for them. Every public work there is executed by the sovereign.

The only business for which indirect production seems absolutely necessary is war. The savage may build his own hut, dress or weave the skins or the mat which clothes him, provide his own weapons for hunting or fishing, and kill the game which feeds him. But he cannot attack or resist a neighboring tribe without a commander. For such purposes, therefore, indirect production, in the form of order given and obeyed, exists even in the most barbarous nations. Among such nations however, the military chief is more a soldier than a general. He is selected more for his bodily than for his mental powers. The heroes of Homer are rather gladiators than leaders. It is by his vast strength and his spear of two and twenty cubits that Ajax protects the Grecian ships. No strategic merit is attributed to Hector. The Trojan cause rests on him, but he supports it merely as a *Πεομαχος*. When Diomed warns Latinus not to provoke Oneas he refers only to his bodily qualities.

Quantus

In clypeum assurgat, quo turtine torqueat hastam.

With two more such men, he adds, Troy would have been the invader and Greece the victim.

To a certain extent, indeed, this is merely a poetical representation of actual facts. We know how much the efficiency of troops depends on the example and the impulse which they receive from their immediate leader. Though Rupert had little skill, his charge always scattered the Pashamestorians [?]. Napoleon always maintained that if Murat had commanded his cavalry at Waterloo

the British squares would have been broken. The victory of Marengo is always mentioned as the work of Dessain—the thousands that accompanied him are forgotten. A poet naturally embodies in his hero the powers which he in fact exerted though by the intervention of others, and ascribes to his personal prowess the results which were really produced by his influence. But after allowing for all this, it must be admitted that the Homeric battles imply a state of things in which the general was expected to be the most forward combatant. He was too accurate a describer, and sang to audiences too familiar with war to have ascribed the final defeat of the Trojans to the single arm of Achilles, if it had not been probable that a single arm might have had a great share in producing it.*⁷⁷

2. Productive and Unproductive Laborers. [I now proceed to consider a different view of production], supported by the great authority of Adam Smith. It is contained in the following passage which, notwithstanding its length I shall extract, instead of endeavoring to state its substance, as any attempt to clothe the meaning of that unrivaled writer in any words but his own must do him injustice.

There is one sort of labor (says Adam Smith) which adds to the value of the subject upon which it is bestowed; there is another which has no such effect. The former, as it produces a value, may be called productive; the latter, unproductive labor. Thus the labor of a manufacturer⁹ adds, generally, to the value of the materials which he works upon, that of his own maintenance and of his master's profit. The labor of a menial servant, on the contrary, adds to the value of nothing. Though the manufacturer has his wages advanced to him by his master, he, in reality costs him no expense; the value of those wages being generally restored, together with a profit, in the improved value of the subject upon which his labor is bestowed. But the maintenance of a menial servant never is restored. A man grows rich by employing a multitude of manufacturers; he grows poor by maintaining a multitude of menial servants. The labor of the latter, however, has its value, and deserves its reward as well as that of the former. But the labor of the manufacturer fixes and realizes itself in some particular subject or vendible commodity, which lasts for some time at least after that labor is past. It is, as it were, a certain quantity of labor stocked and stored up to be employed, if necessary, upon some other occasion. That subject, or what is the same thing, the price of that subject, can afterwards, if necessary, put into motion a quantity of labor equal to that which had originally produced it. The labor of the menial servant, on the contrary, does not fix or realize

itself in any particular subject or vendible commodity. His services generally perish in the very instant of their performance, and seldom leave any trace of value behind them, for which an equal quantity of service could afterwards be procured.

The labor of some of the most respectable orders in society is, like that of menial servants, unproductive of any value, and does not fix or realize itself in any permanent subject, or vendible commodity, which endures after that labor is past, and for which an equal quantity of labor could afterwards be procured. The sovereign, for example, with all the officers both of justice and war who serve under him, the whole army and navy, are unproductive laborers. They are the servants of the public, and are maintained by a part of the annual produce of the industry of other people. Their service, how honorable, how useful, or how necessary soever, produces nothing for which an equal quantity of service can afterwards be procured. The protection, security, and defense of the commonwealth—the effect of their labor this year—will not purchase its protection, security, and defense for the year to come. In the same class must be ranked, some both of the gravest and most important, and some of the most frivolous professions: churchmen, lawyers, physicians, men of letters of all kinds; players, buffoons, musicians, opera-singers, opera-dancers, etc. The labor of the meanest of these has a certain value, regulated by the very same principles which regulate that of every other sort of labor; and that of the noblest and most useful produces nothing which could afterwards purchase an equal quantity of labor. Like the declamation of the actor, the harangue of the orator, or the tune of the musician, the work of all of them perishes in the very instant of its production.

Both productive and unproductive laborers, and those who do not labor at all, are all equally maintained by the annual produce of the land and labor of the country. This produce, how great soever, can never be infinite, but must have certain limits. According as a smaller or greater proportion of it is in any one year employed in maintaining unproductive hands, the more in the one case and the less in the other will remain for the productive, and the next year's produce will be greater or smaller accordingly; the annual produce, if we except the spontaneous productions of the earth, being the effect of productive labor.

That part of the annual produce of the land and labor of any country which replaces a capital, never is immediately employed to maintain any but productive hands. It pays the wages of productive labor only. That which is immediately destined for constituting a revenue either as profit or as rent, may maintain indifferently either productive or unproductive hands.

The rent of land and the profits of stock are everywhere the principal sources from which unproductive hands derive their subsistence. These

are the two sorts of revenue of which the owners have generally most to spare. They might both maintain indifferently either productive or unproductive hands. They seem, however, to have some predilection for the latter. The expense of a great lord feeds generally more idle than industrious people. The rich merchant, though with his capital he maintains industrious people only, yet by his expense, that is, by the employment of his revenue, he feeds commonly the very same sort as the great lord. The proportion between capital and revenue, therefore, seems everywhere to regulate the proportion between industry and idleness.¹⁰

As far as I understand this passage, Adam Smith holds it to be essential to productive labor that its results should last for some time after that labor has ended; and, therefore, be capable of being sold again or accumulated by the first purchaser. He excludes, therefore, from the class of productive laborers all those whom I have termed producers of *services*—since services are not, in his opinion, durable or capable of accumulation or of successive sale.

If this had been a mere question of nomenclature I should not have thought it necessary to dwell on it. Neither the term “producer of services,” nor the term “unproductive laborer,” is quite free from objection, though I think the latter the more likely to mislead. But as he draws from his division of laborers into productive and unproductive inferences of great importance, as he believes that the wealth of a country depends on the proportion which the one class bears to the other—increases with the increase of the productive, and diminishes with the increase of the unproductive class—and as his views have been adopted by some of the most eminent subsequent writers [including John Stuart Mill], I think [it necessary to state] at some length the grounds on which I differ from him and from them.

“The work,” says Adam Smith, “of all unproductive laborers” (in my nomenclature, of all producers of services) “perishes in the very instant of its production.” So far is this from being true that many of his unproductive laborers produce results not merely permanent, but apparently of indefinite duration. The legislator of the Hebrews is among them; but the laws of Moses regulate the conduct of a great portion of the human race after the lapse of perhaps half the time since this globe has been peopled by man.¹¹ The centuries which have elapsed since Hindostan and China received the institutions which now govern the largest portion of the human race have obscured the founders of those institutions with the mists

of fable; but those institutions—the results of this perishable and unproductive labor—not only remain in force but show no tendency to become obsolete.

To descend to more familiar instances, is the advice of a physician who fixes the fluttering life of a child and prolongs to old age what without his assistance would have been extinguished in infancy, productive of no permanent result? Are the services of the barrister who directs the settlement and the will, which prescribe the devolutions of property to unborn generations, of evanescent duration? Does the divine who instructs those who are to educate their own offspring—does he, if we consider only this world, effect a work which is to perish in the very instant of its production? Is it true that the exertions which have effected the defense of the commonwealth this year, will not effect its defense in the year to come? Were the exertions of the Hollanders against the Spanish tyranny, or those of England against a tyranny which threatened to be more extensive and more destructive, productive of mere annual results? Is it not true that they have produced consequences which we may hope that no ages will efface?

It is an equal error to suppose that the results of what Adam Smith calls unproductive labor are less capable of resale than the results of what he calls productive labor. The lawyer resells to his clients and to his pupils the information which he purchased of his legal tutor, and so in fact do the members not only of every profession but of every art and of every employment, except of those very humble occupations for which no skill is required. All purchase as pupils or apprentices the knowledge which they sell as tutors or masters.

Adam Smith appears to me to have been equally mistaken in supposing that the results of the labor of his unproductive laborers are incapable of accumulation. Accumulation does not mean hoarding. What is annually saved (I am using Smith's words), is as regularly consumed as what is annually spent, and nearly in the same time too. But it is consumed, according to Smith, by a different class of persons; according to what appears to me to be the correct view, not necessarily by a different class of persons, but for a different purpose. The greater part of "the annual produce of the land and labor of the community"—the periphrasis by which Smith, when not under the influence of his theory as to unproductive labor, usually designates wealth—is produced in the state best fitted for consumption.

Some exceptions, without doubt, there are. Some articles of food, such as wine and spirits and coffee, may be improved by keeping. So may timber. But the bulk of commodities continue to deteriorate as long as the endeavor to accumulate them in their existing form is prolonged. What would be the result—I will not say of a pastry cook or a greengrocer, but even of those who deal in the most durable commodities of a bookseller or of an ironmonger, to accumulate his stock in trade? A bookseller accumulates by selling as rapidly as he can at a profit, and reinvesting the purchase money in a new stock, to be retained for as short a time as possible. A farmer accumulates not by collecting wheat and oats in his granaries but by consuming them in the shape of seed and of food for himself, his laborers, and his cattle. To prove that services are capable of this sort of accumulation I need refer only to my example of the perpetual transmission of knowledge and skill, and to the obvious fact that the health and strength which we purchase¹² of the physician, the instruction derived from the teacher, and the leisure which is procured for us by the Government's taking on itself the burden of our defense, may be, and constantly are, as much accumulated, that is, as much consumed for the purpose of reproduction, as the seed consumed and reproduced in the earth.

It appears, therefore, that the attempt to divide labor into productive and unproductive on the ground that the results of the former [latter] are more perishable and less susceptible of successive exchange and of accumulation than those of the latter [former] utterly fails. It seems indeed to be founded on an opinion that *that* labor only is productive which produces results addressed to some organ of sense other than the ear or the eye, and in which the hand of the laborer is in actual contact with the immediate instrument or subject of production. This appears an absurd mode of stating Adam Smith's doctrine, but it is the only principle on which that doctrine can be consistently maintained.

At a public festival the tradesman who furnished the ices is one of Adam Smith's productive laborers; the actors and musicians are unproductive—not because the guests enjoy for a longer period, or are more able to reexchange, or to accumulate, the refreshments than the play of the music—but because the former may be felt and tasted, the latter only seen and heard. In this nomenclature, a fiddle-maker is productive, a fiddler unproductive. The pupils of Sir Joshua Reynolds who actually applied the coloring to the canvas were productive laborers. Sir Joshua himself while giving to

them the instruction, which enabled them to use their tools, was unproductive. There are countries where cultivation can be carried on only under immediate military protection. According to Adam Smith's classification, the harvest is not produced by the joint labor of the man who holds the plow and of him who stands by him with the sword; but the husbandman is a productive, the soldier an unproductive, laborer. If we deny to the Ποιμην λαων the title of a productive laborer, what right have we to give it to the shepherd or to the herdsman? What right have we to give it to the architect who plans a building, or even to the master bricklayer and carpenter who superintend its erection, in short, to any of those whom I have called indirect producers—to any persons, except the humble mechanics who carry the hod and wield the hammer? If those who protect the frontier of Holland against human violence are unproductive, how can we call those who protect her sea walls from the warfare of the elements productive?

The consequences which Adam Smith deduces from his theory are as strange as the theory itself. He seems to have been led to his conclusion that the wealth of a country depends on the relatively small number of its unproductive laborers, by observing that the greater part of these laborers are employed in the prevention of evil—in producing, what may be called, negative effects. And granting these effects to be equally produced, the wealth of a society would probably be increased, if the number of persons employed in producing them could be diminished. If with half our present number of soldiers, magistrates, lawyers, and physicians, we could be as well protected from war, violence, fraud, and disease, the wealth of the country would be increased by the amount of what the other half of those persons might produce. And precisely the same good would follow, if we could withdraw from their present employments one-half of our productive laborers and obtain the same amount of commodities from those that remained.

The wealth of a country does not depend on the numerical proportion of the one class to the other, but on their bearing to one another the proportion which enables each class to render its own labor most effective and most to assist the labor of the other. If, in a city where 1,000 men had been constantly employed in forging bars and bolts to keep out thieves, the same purpose could be better effected by employing 100 of them as watchmen, would its wealth be diminished by such a conversion of productive into unproductive laborers? The proportion of those who produce serv-

ices to those who produce commodities is much greater in England than in Ireland, but which is the richer country? In a perfectly savage state there are, as I have already remarked, no producers of services, except the chiefs who lead them in war. Every individual relies on himself, not only for his food and clothing but also for his security; and is wealth the result?

Adam Smith's attention while writing this passage seems to have been engrossed by the needless retainers of great families, the only persons to whom his remarks on the producers of services are, in general, applicable. I cannot otherwise account for his stating that capital is dedicated to the maintenance of productive laborers and revenue to that of the unproductive. The greater part of the higher orders of his unproductive laborers, those who afford instruction and security are maintained out of capital, or, in other words, the expenditure on their maintenance is a reproductive expenditure. Even a great part of menial servants are so maintained. The servants who enable a merchant or banker to devote his whole time to a labor, which on reflection Adam Smith must have allowed to be productive of wealth, are themselves as much employed for the purpose of reproduction as his clerks and shopmen. On the other hand, the revenue of the opulent, even when the whole of it is dedicated to the immediate enjoyment of its possessor, is principally laid out in the purchase of dress, equipage, furniture, and other tangible commodities, the results of productive labor.

The same narrow view seems to have induced him, when he became warm with his subject, to call his unproductive laborers the idle part of the community. On the part of all producers of services I must protest against this designation. If there are any toils peculiarly exhausting they are those which his unproductive laborers, as a class, undergo. If there are any laborers peculiarly prone to an intemperance in toil, injurious to both body and mind, they are those who feel the stimulus and the responsibility of having to provide for the instruction and security of the community.

Among the economists to whom I have referred as adopting Adam Smith's classification is Mr. Malthus; and his acuteness and above all his perfect candor and sincerity give great weight to any opinion which he supports. He challenges his opponents to show on what principle, except the complete adoption of Adam Smith's theory, the nature of saving, and the different effects of parsimony and extravagance can be explained.¹³

The answer to this question, the difference between saving and

spending, is to be found in distinguishing not productive from unproductive labor or commodities from services, but, [as stated previously], productive from unproductive¹⁴ consumption. To *save* is to consume for the purpose of reproduction; to *spend* is to consume for the purpose of enjoyment. The amateur who builds and mans a pleasure yacht, and the merchant who builds and mans a trading vessel both employ laborers to produce commodities and to perform services. But the merchant uses the vessel and the crew for the purposes of reproducing an equivalent or more than an equivalent for the cost of the ship, and the wages, and the victualing of the crew; the amateur uses both ship and crew for no purpose except his own amusement. The same class of laborers are employed on a palace and on a manufactory, a parterre and a nursery garden, in grooming a racer or a cart horse, in teaching medicine and in teaching dancing; but their labor, or the result of their labor, is employed in the one case for the purpose of reproduction, in the other case for that of pleasure. An indistinct perception of this difference seems to have been floating in the minds of Dr. Smith and of Mr. Malthus, and their error consists in having applied to the laborers a distinction which really exists in the purposes to which those who purchase their labor, or its result, apply it.*⁷⁸

3. Material and Immaterial Products. Products have been divided into material and immaterial; or, to express the same distinction in different words, into commodities and services. This distinction was suggested by Adam Smith's division of labor into productive and unproductive. Those who thought the principle of that division convenient, feeling at the same time the absurdity of terming unproductive the labor without which all other labor would be inefficient, invented the term, *services* or immaterial products, to express its results.

A physician (says M. Say) visits a patient, examines his symptoms, prescribes a remedy, and departs leaving no product which the patient or his family can part with, or preserve for future consumption.

Was the physician's labor unproductive? Absurd! The patient was saved. Was its product unsuceptible of exchange? No: the advice was exchanged for the fee; but that advice ceased to be wanted the instant it was given. It was produced by being spoken, and consumed by being heard. Its consumption and production were co-temporary.

This I call an *immaterial product*.¹⁵

M. Storch, without altogether rejecting the term, immaterial products, substitutes for it, *biens internes*, and subdivides these

goods of the mind into eight [categories]: health, skill, learning, taste, morality, religion, security, and leisure. The labors which produce these results he calls *services*.

M. Storch is the only writer who has attempted to enumerate, or even clearly to indicate the laborers who are to be considered as producers of services; and he alone has dwelt on the distinction between services, and the *results* which those services occasion. It is, as I before observed, to the latter, to the results of the services which I have mentioned, that he gives the name of *biens internes*, or immaterial products. He considers them as forming a part of the revenue of their possessors, or articles of value, or, in other words, exchangeable products.¹⁶

The incorrectness of this language appears obvious the instant it is formally stated. If taste, morality, and religion were really the objects of purchase, wealth would be a better thing than any political economist, however prejudiced in favor of his own science, ever ventured to suppose. What we buy is not health, learning, or piety. All that the physician, the tutor, or the divine, however excellent in his department, can produce is the *means* by which these ulterior results, may more or less certainly, and more or less imperfectly be effected. The disease may be incurable, or the pupil inattentive, or the seed may be sown on the rock, or by the wayside; but if, in each case, the best means which the nature of the case admitted have been adopted, the producer of those means is entitled to his remuneration, though they have failed, wholly or partially, in producing the intended result. The exchange was complete the instant the advice or the lecture was given and the fee received.

The objections to this nomenclature become still more manifest when we find *leisure* termed an immaterial product, the result of the services of clerks and servants. If a servant is the producer of an immaterial product because (by undergoing labors which his employer must otherwise himself undergo, or do without their effects) he gives to him leisure, every other producer belongs to the same class; and leisure is the only ultimate product. If a servant is to be considered as the producer, not of the polish on a pair of boots, but of a certain portion of leisure, so must the bootmaker, and so must all the previous producers by whose united exertions the wearer of the boots is saved the trouble of making them.*⁷⁹

All the distinctions that have been attempted to be drawn between material and immaterial products, or between commod-

ities and services appear to me to rest on differences existing not so much in the things themselves, which are the objects considered, as in the way in which they attract our attention. In those cases in which our attention is called principally not to the act of occasioning the alteration, but to the result of that act, to the thing which has been altered, economists have termed the person who occasioned that alteration the producer of a commodity, or of a material product; where, on the other hand, our attention is called principally not to the *thing* altered, but to the *act* of occasioning that alteration, economists have termed the person occasioning that alteration, the performer of a service, or the producer of an immaterial product. A shoemaker alters thread, leather, pegs, and wax, into a pair of shoes. A shoeblack alters a dirty pair of shoes into a clean pair. In the first case our attention is called principally to the things as altered. The shoemaker is therefore said to make, or to produce shoes. In the case of the shoeblack, our attention is called principally to the act as performed. He is not said to make or to produce the commodity, clean shoes, but to perform the service of cleaning them. In each case there is of course an act and a result; but in the one case our attention is called principally to the act, in the other to the result of that act.

Among the causes which direct our attention principally to the *act*, or principally to the *result*, seem to be, first, the degree of change produced, and secondly, the mode in which the person who makes the change usually sells, and the person who benefits by that change usually purchases, the alteration.

Where the alteration is but slight, especially if the thing that has been subjected to alteration still retains the same name, our attention is directed principally to the act. A cook is not said to *make* roast beef, but to *dress* it; but he is said to make a pudding, or the more elaborate preparations which we call *made* dishes. The change of name is very material. A tailor is said to make cloth into a coat. A dyer is not said to make undyed cloth into dyed cloth. The change produced by the dyer is perhaps greater than that produced by the tailor, but the cloth in passing through the tailor's hands changes its name; in passing through the dyer's it does not. The dyer has not produced a *new name*, nor, consequently, in our minds, a new thing.

The principal circumstance, however, is the mode in which the alteration is sold and purchased. Our attention naturally fixes itself on the thing which we have been accustomed to purchase,

and according as we are accustomed to buy the labor or the article on which that labor has been expended, as we are in fact accustomed to purchase a commodity or a service, we consider a commodity or a service as the thing produced.

In some cases the producer is accustomed to sell, and we are accustomed to purchase, not the thing altered but the labor of altering it. This occurs wherever the thing altered was, before its alteration, the property of the purchaser of that alteration. This is the case with all the subjects on which menial servants are employed. They sell and their master purchases nothing but their labor employed on *his* commodities. It is the case as to all services performed to the person of the purchaser. It occurs again whenever the thing altered is the person of the producer. Neither the operation performed by a surgeon, nor the gestures exhibited by an actor, nor the vigilance of a watchman, can be purchased, except by purchasing the act of their performance. The thing which they alter is the human body, and therefore unsalable.

In other cases the producer is accustomed to sell and we are accustomed to purchase, not his labor, but the subject on which that labor has been employed. These cases are comparatively rare in the ruder states of society, but increase with the increase of civilization. Production for the purpose of selling the object produced, is the result of the division of labor. In the patriarchal times almost the only things exchanged were services on the one hand and subsistence on the other. Abraham did not sell for money the flocks and herds which constituted his wealth; he used them to feed his servants. The queens and princesses of the heroic age were habitually employed in overlooking the labors of their maidens. All the principal manufactures were domestic. Even in Rome, in its highest wealth, the great expenditure of the rich was on their servants. Crassus was said to have kept 20,000. In the reign of Nero, the town establishment of Pedanius Secundus, who is not mentioned as a man of great wealth, was 400. The case was the same in England till within the seventeenth century. The division of labor has banished from our halls to our manufactories the distaff and the loom, and has turned spinners and weavers from producers of services into producers of commodities.* ⁸⁰

CHAPTER IV

THE TWO FACTORS OF PRODUCTION: MAN AND CAPITAL

1. *Classification of the Factors of Production Commonly in Vogue.*
2. *The Need for a New Classification and Nomenclature.*

1. Classification of the Factors of Production Commonly in Vogue.

The School of Quesnay to whom the French now give the name of Physiocrats divided the instruments of production into three classes, to which they gave the names of *land*, *capital*, and *labor*.

By the term *land* they designated all the instruments of production which are supplied by the unassisted bounty of nature with the exception of the human qualities of mind and body. It included, therefore, besides the mere soil the minerals which are below and the natural forests which are above its surface, the rivers which intersect it, the seashore which surrounds it, and the wild inhabitants of the earth and of the waters. The word *labor* (*travail*) they used to express the exertion of the human powers of mind and body. And they included under the word *capital* all the accumulated wealth which is the produce of human industry.

The successors of the Physiocrats, both in England and in France, have followed the principle of this classification. The great defect of Adam Smith is the want of formal statements. He frequently leaves his premises to be implied from his conclusions, and he has done so with respect to the instruments of production. He nowhere expressly says what they are; but in his chapter ¹⁷ on the component parts of the price of commodities he states that in the rudest state of society the value of commodities depends solely on the quantity of labor employed in acquiring or producing them. That in a more advanced state, when wealth has accumulated in the hands of individuals, some of them will naturally employ it in setting to work industrious people whom they will supply with materials and subsistence in order to make a profit by the sale of their work. That in exchanging the completed manufacture for money or for other goods, something beyond the prices of the materials and the wages of the workmen must be given for the profits of the undertaker, who hazards his stock in the adventure. And lastly that as

soon as the land of a country has all become private property the landlords, who like all other people love to reap where they have never sowed, demand payment for its use. And that, as the use of land is necessary in most kinds of production, the rent of land makes a part of the price of the greater part of commodities.

So that (he adds) the price of all the commodities which compose the whole annual produce of the labor of every country taken complexly must resolve itself into three parts, and be parcelled out among the different inhabitants of the country either as the wages of their labor, the profits of their stock, or the rent of their land. Wages, profit, and rent are the three original sources of all revenue as well as of all exchangeable value.

This, as I said before, implies that he considers labor, capital (or as he here calls it by its generic name *stock*), and land as the three instruments of production.

I am not aware that this classification of the instruments of production has been objected to by any of the English economists. They differ from one another widely, as we shall hereafter see, as to the relative extent of the three different classes; but they agree as to the number of classes and as to the names to be given to them. Nearly the same may be said of the French economists, except that J. B. Say has substituted for the term "land" that of "natural agents," and has divided natural agents into those which are incapable of appropriation, such as the sun and the wind, and those which are capable of appropriation, of which the most important is land.

The latter of these innovations appears to me to be inconvenient. There are scarcely any natural agents incapable of appropriation, since it scarcely ever occurs that they can be employed except in connection with some appropriated agent. The value of a vineyard may be increased by its peculiarly good exposure to the sun or that of a house by its peculiarly airy situation. But this warmth and this airiness are really attributes of the site of the vineyard and of the house, and therefore capable of appropriation. To which it may be added that the natural agents, if there be any, which are unsusceptible of appropriation cannot be productive of wealth, since no one would pay for services which were at every one's command.

The substitution of the term natural agent for that of land is certainly an improvement, if the instruments, of which land is one,

are to be retained as a separate genus. It is not, like the term land, obviously inadequate.

M. Say's classification and nomenclature have been adopted by his successors in France as far as my knowledge of their works extends.

The German writers¹⁸ with whom I am best acquainted are Hermann, and Rau, and [also] Storch, whom I class among the Germans to whom he belongs by birth, education, and modes of thought, though he writes in French.*⁸¹ Storch and Rau follow the classification and nomenclature of Say. Hermann reduces the instruments of production to two: *Arbeitskraft* (which may be translated the faculty of laboring), and capital. Land¹⁹ and all other natural agents he includes under the genus capital.*⁸²

2. The Need for a New Classification and Nomenclature. Both in confining to two genera the instruments of production, and in objecting to the word labor as the name of one of them, I agree with Hermann. My reasons for doing so are these:

First with respect to the term labor. That word, as well as its corresponding terms—*Arbeit*, *travail*, and *lavoro*—all signify, not a thing but an act. They are all gerunds of the verbs to labor, *arbeiten*, *travailler*, and *lavorare*. But what we want is a term to express, not the act performed by the laborer, but the instruments which he uses. These are his powers of body and mind—a class for which the more manageable German language offers the word *Arbeitskraft*, but for which in English I cannot find a more concise expression. This, however, is a question of nomenclature merely. Without altering the existing classification, I would merely designate by the words “the mental and bodily qualities of man,” the class of instruments which Adam Smith and his followers designate by the word labor.

The question whether land and the other instruments spontaneously afforded by nature can more conveniently be included in the genus capital, or made to constitute a separate genus is one of more importance.

The Physiocrats and Adam Smith seem to have been induced to treat land, which they used as a general term for all the agents supplied by nature, as a separate genus; in consequence of their perceiving (or thinking that they perceived) that it afforded a revenue differing in kind from that afforded by the employment of capital or of the human qualities. Neither wages nor profits, they said, can be obtained without some sacrifice. Capital can be acquired and preserved only by saving and economy; to em-

ploy it is troublesome, to lend it is dangerous. Labor is fatiguing; it interferes with amusement, and in many trades it injures the health. Wages and profit therefore, they said, are the creation (and the painful creation) of man. Rent is the bounty of nature. The landlords reap where they have never sown; they toil not, neither do they spin: they merely open their laps to receive what she throws into them. Profit and wages, they said, have a maximum and a minimum: sink them too low, and the capitalist will not keep up his capital, or the laborer will die of want; raise them too high, and the rapid accumulation of capital will sink profits, or the increase of population will lower wages. Rent has neither a maximum nor a minimum. The landlord receives whatever the competition of those who wish to use his land forces them to offer to him. As it is all pure gain he does not reject the smallest rent if he can get no more, and he asks the largest which they can afford to give.

To a considerable extent this is true; but neither Adam Smith nor the Physiocrats seem to have been fully aware that the greater part of what we call rent, is merely profit on the capital employed in fitting the land for use. Still less did they perceive that the remainder is the gift, not of nature but of *monopoly*: not of abundance but of scarcity; and exists wherever an instrument of production not universally accessible, is employed and shows itself, indeed, in profits and in wages whenever the one or the other rises above the general average. To give to all such extra profit and extra wages the name of rent would, I think, be an inconvenient departure from ordinary language. Most persons would be puzzled if they were told that when Madame Goldsmid²⁰ receives £200 for a night's performance, 10s. of it are the wages of her labor, 30s. more the profit on her acquired capital of knowledge and skill, and the remaining £198 is a rent derived from her extraordinary powers of which nature has given her a monopoly. And yet this would be a favorable case for such a nomenclature; since it is one in which the causes of the extraordinary remuneration are obvious. In the great majority of cases in which wages or profits rise beyond the average, the causes are imperceptible, even to the persons who gain by them. They are the compound operation of many obscure peculiarities. Tact in obtaining good customers or employers and avoiding bad ones; favorable opportunities caught or neglected or never presented; the conduct of friends, and of enemies, and of rivals and of supporters—these and many other causes to which, because we know them only by

their effects, we give the name of chance, apportion the whole aggregate of wages and profits among the millions of producers in a great country. It is often difficult to distinguish profit from wages. But to add a third sort of revenue, to which a portion of what is usually called profit or wages is to be attributed, appears to me an unnecessary complication.

But the great objection to the treating land as a separate instrument of production, is the difficulty, which will be more clearly shown [in the next chapter], of framing any definition of capital from which land can with propriety be excluded.

I mentioned [in the introductory part of this work ²¹] two important rules in classification—one that the different classes should be separated by real differences, the other that those differences should be capable of being ascertained. Now it is difficult to perceive any real difference between the polders which the Dutch have reclaimed from the sea and the adjoining lands supplied to them by nature; between a river naturally navigable and one which has been made so by art; between a river rendered navigable by art and an artificial canal; between a canal and a macadamized road; between a road and the earthworks of a railway, or between those earthworks and the rails or the engines. And if there be a real difference between the first and the last link of the chain, where is the line between them to be drawn?

On these grounds I think that the most convenient nomenclature and classification of the instruments of production, is to divide them into only two genera; and to designate the one by the term mental and bodily qualities of man, and the other, comprising everything except man, by that of capital.

The first of these terms does not require to be defined. It is however inconveniently long—perhaps the single word *man* might be substituted for it.

The word capital, as might have been expected from the complexity of the ideas which it denotes (even in the narrowest sense that can be affixed to it) is used in many different senses. These differences of language, indeed, have not produced practical results as important as those which have been occasioned by the ambiguity of the terms *wealth*, *tendency*, or *currency*. They have not affected the conclusions at which political economists have arrived, but they have materially influenced their nomenclature and arrangement.*⁸³ [The nature of capital will constitute the subject matter of the next Part of this work.]

NOTES ON PART III

Page 115.

¹ [Compare Part VI, Chapter I, section 2; also next chapter, first section.]

Page 116.

² [Cf. Part VI, Chapter I, section 2.]

Page 118.

³ [Basing economic science upon the utilitarian doctrine of *the greatest good to the greatest number*, W. Stanley Jevons, a young contemporary of Senior and one of his ardent admirers, emphasized that, contrary to the latter's views, the object of economics is "to maximise *happiness* by purchasing pleasure at the lowest cost of pain." *Theory of Political Economy*, 3d edition, p. 23. See also p. 37.]

⁴ [See below Chapter III.]

⁵ [The *labor theory of wealth*, owing its origin to Ricardo and his followers—particularly James Mill, Colonel Torrens, Malthus, and McCulloch—was later elaborated by Karl Marx and is still vigorously defended in working-class circles as one of the cardinal doctrines of socialism. Thus, according to McCulloch—

"Labor is the only source of wealth. Nature spontaneously furnishes the matter of which all commodities are made; but until labor has been expended in appropriating matter, or in adapting it to our use, it is wholly destitute of value, and is not, nor ever has been, considered as forming wealth. Place us on the banks of a river, or in an orchard, and we shall infallibly perish, either of thirst or hunger, if we do not, by an effort of industry, raise the water to our lips, or pluck the fruit from its parent tree." (*Principles of Political Economy*, Chapter I.)

Commenting on this passage Senior says:

"To call stooping to pick up what lies before the feet an act of labor, or to say that a hungry man in an orchard plucks an apple by an exertion of industry, is an unwarrantable perversion of language. Who ever considered a guest at a feast as exercising industry in conveying the victuals to his mouth? And what is the difference between taking wine from a decanter and water from a spring? It is this determination to refer all value to labor, that has led Mr. McCulloch and Mr. [James] Mill to consider the improvement of wine in a cellar the result of human labor. *Attempts like these to bend facts and language into an accordance with hasty generalization, have thrown on political economy the ridicule which now impedes the diffusion and progress of the science, and consequently the improvement of mankind.*" (Lo¹, 345-6.)]

Page 128.

⁶ [See next chapter.]

Page 131.

⁷ [See Part IV, Chapters IV and V.]

Page 132.

⁸ [Other terms used in business literature—*manager, executive, entrepreneur, enterpriser, undertaker, organizer, promoter, and captain of industry*—have practically the same meaning as that given by Senior to “indirect producer.” It must be noted, however, that the author’s use of that term covers also professions such as educational directors, military and civil-service chiefs whose activities are only *indirectly* connected with business enterprise.]

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⁹ [I.e., a mechanic.]

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¹⁰ *Wealth of Nations*, Book II, Chapter III.

¹¹ [Senior apparently has in mind the theological idea, based on Biblical chronology, that man was created 5,680 and some odd years ago. The reader scarcely need be reminded that that conception as to the age of the human race is now regarded by scientists as a relic of ancient mythology. The various discoveries in the domains of geology, paleontology, and archæology have established the fact beyond a reasonable doubt that the human species as well as many of the lower animals existed many thousands of years before the alleged creation of the universe.]

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¹² [This passage (written in 1847) is obviously inconsistent with the next section (written in 1827) in which the author criticizes M. Storch for regarding health, learning, and leisure as exchangeable products. The question is, Has Senior changed his views on the subject, and if not, how shall we account for such an inconsistency?

That the author’s matured ideas on wealth are in accord with those expressed in section 3 of this chapter can be easily proven by reference to section 1 of the previous chapter (also written in 1847). In that section Senior takes up the question as to whether the act performed (such as a physician’s advice), or the consequence of that act (the patient’s health and strength) is to be considered an economic product, and he decides in favor of the former.

The apparent inconsistency, however, may be accounted for by the fact (as stated in note 17 to Appendix II), that the author has copied the present passage from a MS. which was prepared in 1826, and in doing so he has failed to detect this incorrect terminology. On the other hand, in Part IV, Chapter II, section 2, Senior refers to knowledge and skill as articles of wealth.]

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¹³ *Principles*, Chapter I, section 2.

Page 142.

¹⁴ [See Part II, Chapter III, section 3.]

¹⁵ *Liv.* 1, c. 13.

Page 143.

¹⁶ *Tome* 5, p. 24.

Page 146.

¹⁷ [*Wealth of Nations*, Book I, Chapter VI.]

Page 148.

¹⁸ ["Of these" (Senior remarks), "Hermann is perhaps the most original thinker, Rau the most accurate and diligent observer. Storch's work was a course of lectures addressed to the arch-dukes Nicholas and Michael of Russia and published by the Russian government during the reign of Alexander" (in 1815). "It has both merits and defects arising from the circumstances under which it was written. Among its merits are much curious information and illustration supplied by the remarkable physical and social condition of Russia, and the independence of thought, which is natural to a writer living in a society in which he has little to fear from acute criticism. On the other hand, the absence of critics and of rivals has allowed him to fall into errors which he would probably have avoided if he had had an opportunity of submitting the results of his solitary meditations to other minds and profiting by their objections and suggestions. The works of Hermann and Rau are also well worth studying—that of Hermann as containing the views of a clear-headed man on the most general principles of the science: those of Rau, for he has published several, as containing in addition to his own scientific doctrines a very large collection of the opinions of others, particularly as might have been expected, of the German writers, very few of whom are known in this country; and as containing also a vast body of statistical information, intended principally for the use of statesmen and administrators but valuable also to the political economist as affording both corrections and illustrations of his theories." (Ln¹¹, 14-16.)]

¹⁹ [Without disparaging Hermann's influence on the author, it must be noted that Senior himself, long before he heard of Hermann's writings—indeed, before he could read German at all—had arrived at a similar conclusion with respect to the treatment of land as a species of capital. Lecturing at Oxford in 1827, Senior defined capital as "an article of wealth (with the exception of land, and of what is generally included under the word land), destined to be employed in the production or distribution of wealth." Then he adds: "I say with the exception of land, not meaning to intimate that that exception *ought* to be made, but that in fact it generally *is* made. I am inclined to think that it would have been better if the land itself, when productively employed had been included under the word capital, and one reason for thinking so is the difficulty of distinguishing from land, those improvements which labor has inseparably annexed to it. But in this case, as in many others, I think the greater inconvenience will follow from innovation" (Lo², 58-59).

It thus appears that Hermann's judgment merely served to enhance Senior's own conviction in regard to this matter. (Cf. Part IX, note 2.)]

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²⁰ [Better known by her maiden name, Jenny Lind.]

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²¹ [Part I, Chapter III, section 3.]

PART IV

CAPITAL: ITS NATURE, FUNCTIONS, ORIGIN, AND GROWTH

CHAPTER I

SURVEY OF SOME POPULAR AND TECHNICAL DEFINITIONS OF CAPITAL

1. What Business Men Usually Understand by the Term Capital.
2. Adam Smith's Conception of Capital. *3. Views of the Anglo-American School.* *4. Definitions of Capital according to French and Spanish Economists.* *5. The German Viewpoint.*

1. What Business Men Usually Understand by the Term Capital. I shall preface my own definition of capital first, by an inquiry into the senses in which that word is employed in ordinary use; and secondly, by a statement of the meanings which have been affixed to it by some of the most eminent of my predecessors.

In ordinary use the word capital signifies that portion of a man's property which he employs for the purpose of acquiring profit or, in some cases, for the purpose of avoiding expense; that portion which gives an income or enables one to be earned or, in some cases, which supplies the place of one. It is generally, but not universally, confined to material property—knowledge and skill are not usually called capital. It might be convenient so to designate them, but in ordinary language it would sound metaphorical. One reason why they are not so termed is, perhaps, because they cannot be absolutely transferred, and we generally associate with the word capital the idea of perfect transferableness.

These immaterial sources of profit, not generally termed capital, are numerous and important. In a plate glass company of which I was a director, the land, buildings, machinery, materials, finished glass, book debts, and money in hand amounted to about £200,000. The net profit was about £30,000 a year and this large profit raised the value of the 1,000 shares into which the property was divided to about £300 apiece. A material capital therefore of about £200,000 was worth £300,000.

It seems strange that in the eager competition among the employers of capital the company was allowed for many years to retain this great profit. Why, it may be asked, did not rivals start up, content themselves with a profit less than 15 per cent per

annum and undersell them? The attempt was made over and over. During the ten years ending in 1848 at least £700,000 was spent by persons who established manufactories of plate glass. They erected buildings as good as ours and used as good machinery. But not one was profitable. The greater part were discontinued within a few months or a few years of their establishment, and those which continued, existed not in the hands of their original founders, but in those of persons who bought from them at a trifling price their buildings, machinery, and stock in trade.

To what, then, is the large and steady profit obtained by the company of which I am speaking to be attributed? To its immaterial advantages. It had existed for nearly a century. There were about 1,500 workpeople employed in its halls and furnaces and polishing rooms, whose fathers and whose grandfathers, perhaps whose great-grandfathers had been the servants of the company. They possessed a traditional skill which probably they could not explain in words—which perhaps they often exercised unconsciously. The company had hereditary customers as well as hereditary laborers; and the result was a great and constant profit while almost every rival establishment—every one I believe with a single exception—had, as I have already mentioned, been a source of loss.

But at length a time came when the peculiar advantages of the company were transferred to their rivals. The managers to whom their prosperity during the previous twenty-five years had been mainly owing, were two—a father and son. The son died. The father's health, activity, and diligence gradually declined. The workpeople, no longer under strict instruction, became negligent. Complaints were made of the deterioration of the glass, customers were lost, and bad debts accumulated. Their rivals had learned their trade, and had trained a skillful body of workpeople. For some years the company maintained a dividend—though not at the former rate—by the sale of its large accumulated stock. At length they became alarmed and put their affairs in the hands of an accountant. He reported that their trade had been unprofitable for some years, and during the last year had produced a loss of £8,000.

Their immaterial capital was gone. But their works remained. These works were favorably situated, in the midst of extensive coalpits, accessible by railroads, and with an abundant supply of water. They leased them for a long term at £5,000 a year, and their capital of £300,000 sank in value to £75,000.

When applied to material objects, the word capital includes all instruments used for the production of wealth, from the London docks down to the pillow and bones of the lace maker. It includes all the materials which are to be made the subject of further production—the timber of the shipbuilder and the rough diamonds of the jeweler.

It includes all commodities intended to be sold or let—the house completed by a builder and exposed for sale or hiring, the furniture in an upholsterer's shop, and the lace in a milliner's. It includes the money which a man of business keeps in his own custody or in that of his banker for the purpose of carrying on his trade, for the purchase, for instance, of materials or the payment of wages. If instead of giving to his workmen only money wages he pays them partly in kind, it includes any store of provisions or clothes which he keeps for that purpose. If his trade be one in which it is the custom to give long credit the book debts owing to him from his customers are a part of his capital, since he would lose his customers if he were to call them in prematurely. By far the greater part of the capital of every eminent London solicitor consists of the debts due to him from his clients which are renewed as they are paid in. All these are things enabling an income to be earned.

A sum of money lent at interest, a rent charge, or an annuity payable by an individual or by the state, are examples of capitals (using, I repeat it, that word in its ordinary acceptation) producing incomes, not enabling them to be earned. So is a landed estate let to a tenant, though perhaps the term capital is less frequently applied to land than to the other kinds of property which I have enumerated. This is probably owing to the circumstance which I have already mentioned that we generally associate with the word capital the power of absolute disposal—a power incident to the possession of movables, but not necessarily or even frequently to the mere occupation of land.

I have said that the word capital is sometimes applied to the things which, without producing an income, or enabling one to be earned, supply the place of an income. Suppose a builder to be the owner of twenty houses which he lets at a hundred a year a piece. They form a capital giving him an income of £2,000 a year, out of which we will suppose that he spends £100 a year in hiring a house for himself. Suppose him now to inhabit one of his own houses instead of letting it, it would sound absurd to say that the house on his inhabiting it ceased to form part of his capital.

This however does not hold universally or perhaps generally. The furniture in a man's house is not considered part of his capital, though it saves him the expense of hiring furniture. If a man accustomed to job an equipage at £150 a year were to expend £400 in purchasing a carriage and horses we should scarcely say that he had become owner of a capital saving him £150 a year. In fact, if the things which are used for the mere pleasure of the proprietor were called capital, the common distinction between a man who spends his capital and one who spends only his income would not exist.

The difference however resides not in the *things* used but in the *use* made of them. The wine in a gentleman's cellar is not capital. But if a wine merchant or an innkeeper were to purchase it and add it to his stock in trade it would become capital, and remain so until resold. So a gentleman's furniture though not capital to him, is capital to a broker who has bought it to make a profit by its resale.

It is to be observed that in giving or refusing to anything the name of capital we never inquire whether its ultimate destination be to afford mere enjoyment, or to effect a further production. A turning lathe is an instrument of production, but a lathe in the house of an amateur turner is not called capital. A cigar, a lace ruffle, and a firework are intended merely to give pleasure; but each of them when part of the stock in trade of a dealer in such commodities is termed capital.*⁸⁴

2. Adam Smith's Conception of Capital. Having enumerated the ordinary meanings of the word capital I proceed to state those which have been affixed to it by political economists.

As a technical name for a class of productive instruments it may be said to have been introduced into political economy by Adam Smith. His English predecessors thought of little but money, and the French Physiocrats, though they perceived that the powers of land and of man could be indefinitely increased by using their products as a means of further production, though they even used the word capital, did not attempt to enumerate or even to sum up its different species or to distinguish it from the general mass of wealth.

Though [almost a century has] passed since Adam Smith first separated capital from revenue and profit from wages, the changes—such as they are—which have been made in his classification and nomenclature have seldom been improvements. And though I

differ from him, as indeed has already appeared, in some not unimportant points, I know no treatise on the nature of capital so full, so instructive and so little objectionable as the first chapter of his second book. It has influenced so much all who have followed him that in order to make my remarks on their views more intelligible I shall state the substance of a considerable part of this chapter.

When the stock which a man possesses (says Adam Smith) is no more than sufficient to maintain him for a few days or a few weeks, he seldom thinks of deriving any revenue from it. He consumes it as sparingly as he can, and endeavors by his labor to acquire something which may supply its place before it be consumed altogether. His revenue is, in this case, derived from his labor only. This is the state of the greater part of the laboring poor in all countries.

But when he possesses stock sufficient to maintain him for months or years, he naturally endeavors to derive a revenue from the greater part of it; reserving only so much for his immediate consumption as may maintain him till his revenue begins to come in. His whole stock, therefore, is distinguished into two parts. That part which, he expects, is to afford him this revenue, is called his capital. The other is that which supplies his immediate consumption.

There are two different ways in which a capital may be employed so as to yield a revenue or profit to its employer.

First, it may be employed in raising, manufacturing, or purchasing goods, and selling them again with a profit. The capital employed in this manner yields no revenue or profit to its employer, while it either remains in his possession, or continues in the same shape. The goods of the merchant yield him no revenue or profit till he sells them for money, and the money yields him as little till it is again exchanged for goods. His capital is continually going from him in one shape, and returning to him in another, and it is only by means of such circulation, or successive exchanges, that it can yield him any profit. Such capitals therefore may very properly be called *circulating* capitals.

Secondly, it may be employed in the improvement of land, in the purchase of useful machines and instruments of trade, or in such like things as yield a revenue or profit without changing masters, or circulating any further. Such capitals, therefore, may very properly be called *fixed* capitals.

The general stock of any country or society is the same with that of all its inhabitants or members, and therefore naturally divides itself into the same three portions, each of which has a distinct function or office.

The first is that portion which is reserved for immediate consumption, and of which the characteristic is, that it affords no revenue or profit. The second is the fixed capital of which the characteristic is, that it affords

a revenue or profit without circulating or changing masters. The third and last of the three portions into which the general stock of the society naturally divides itself, is the circulating capital; of which the characteristic is, that it affords a revenue only by circulating or changing masters.

To maintain and augment the stock which may be reserved for immediate consumption, is the sole end and purpose both of the fixed and circulating capitals. It is the stock which feeds, clothes, and lodges the people. Their riches or poverty depends upon the abundant or sparing supplies which those two capitals can afford to the stock reserved for immediate consumption.*⁸⁵

3. Views of the Anglo-American School. I now proceed to consider the significations in which [the word capital] has been used by [Adam Smith's] successors. The following are the definitions employed by some of the most eminent English economists—including under the name English the Anglo-Americans, as using the same language and belonging in general to the same school.

Lord Lauderdale.—The various means of supplanting human labor and of performing labor which could not be accomplished by the personal exertions of man.¹

Dr. Hamilton.—Accumulated wealth.²

He enumerates at some length the particulars of which accumulated wealth consists, and apparently includes under that term all that has been produced by labor. He excludes nothing to which I have applied that name except land, as given by nature, and human knowledge and skill.

Ricardo.—That part of the wealth of a country which is employed in production consisting of food, clothing, tools, raw materials, machinery and other things necessary to give effect to labor.³

James Mill.—Something produced for the purpose of being employed in further production.⁴

Torrens.—Those things on which labor has been employed and which are destined not for the immediate supply of our wants, but to aid us in obtaining other articles of utility.⁵

Cooper (President of South Carolina College).—Capital is wealth saved out of the earnings of former industry and laid out with a view to future profit. It consists of food, clothing, habitation, machinery, buildings, utensils, and all improvements calculated with a view to future profit.⁶

Ramsay.—A portion of the national wealth employed or meant to be employed in favoring reproduction.⁷

Carey (of Boston, United States).—All articles possessing exchangeable value, the accumulated results of past labor.⁸

Mrs. Marcet.—Accumulated produce which tends to facilitate future production.⁹

Banfield.—Wealth bestowed by nature, or accumulated by abstinence and employed in reproduction.¹⁰

Tucker (Professor of political economy, Virginia).—Capital is that portion of useful products which has been saved out of the former profits of labor or land. It arises from the excess of production beyond consumption and consists of machines, tools, provisions, manufactures of all kinds and money—of every material product in short that has exchangeable value.¹¹

Wayland (President of Brown University, U. S.).—The material on which industry is about to confer value, that on which it has conferred value, and the instruments used in conferring value; as well as the means of sustenance by which the human being is supported while he is engaged in the operation. Thus the capital of a nation is composed of raw material, of articles ready to be consumed, of buildings, ships, and manufactures and of the various substances by which human life is prolonged and rendered desirable.¹²

Vethake (Professor in the University of Pennsylvania).—Capital consists first of the wages of labor (meaning thereby, not money wages but the commodities used by the laborer); secondly, of the instruments and constructions which assist the laborer in the production of wealth; thirdly, of the materials in different states of preparation on which labor is exerted; fourthly, of the amount of the finished commodity which it may be thought expedient by the capitalist to keep on hand; and lastly of the money appropriated to the circulation of the various parts of capital.¹³

McCulloch.—The capital of a country consists of those portions of the produce of industry existing in it which are directly available either for the support of human beings or for the facilitation of production.¹⁴

Malthus.—That portion of the stock of a country which is kept or employed with a view to profit in the production or distribution of wealth.¹⁵

John Stuart Mill.—A stock previously accumulated¹⁶ of the products of former labor, and destined to afford the shelter, tools, and materials which the work requires, and to feed and otherwise maintain the laborers during the process.*⁸⁶

4. Definitions of Capital according to French and Spanish Economists. I now come to the French definitions, beginning with that adopted by the Father of the modern French economists, *J. B. Say*.

Besides (he says) the instruments afforded by nature, there are others the result of industry, such as the seed furnished by agriculture, the cotton wool by commerce, the tools and machinery by the artisan. All these advances for the purposes of production are capitals.¹⁷

Those which have been mentioned (he adds) are themselves material and assist in producing material commodities. Others are immaterial, such as knowledge and skill, and may produce or assist in producing either material or immaterial products.¹⁸

And lastly, he includes under capital all commodities of slow consumption such as houses, plate, and furniture, though employed merely for the purpose of pleasure and without any view to profit.¹⁹

Louis Say.—The capital of a nation is the mass of the means and of the causes of production which that nation possesses. It is divided into three great classes.

First, immovable capital, such as lands and houses.

Second, movable such as merchandise, tools, and money.

Third, immaterial capital, such as physical force, intellectual capacity, skill, and credit.²⁰

Ganahl.—Capitals are first, the accumulated products of human labor, which are employed in the production of objects necessary or agreeable to man; and secondly, such objects themselves when durable.²¹

Droz follows Adam Smith in dividing wealth into capital and consumable stock (*fonds de consommation*). Under the first he includes instruments and raw materials, money, for payment of wages, and finished goods unsold. Under the second, the things which are employed for the purposes of giving enjoyment to their possessor, whether their consumption be slow or rapid. The former therefore, he says, are useful only indirectly, as a means, the latter directly and in themselves.²²

Dutens states that capital is wealth saved from unproductive expenditure to be employed in production. As examples he enumerates tools, manufactories, raw materials, the subsistence of the capitalist and his workpeople, and all the other funds which must be advanced by a person who undertakes or carries on an agricultural, manufacturing, or commercial business. He also includes knowledge and skill, and therefore must use the word saving (*épargne*) in a wider sense than is usually given to it.²³

Rossi.—Capital is that part of the wealth produced by man which is destined to reproduction. The words *produced by man* are intended to exclude the two other instruments of production, labor and land. The words *destined to reproduction* are intended to exclude dwelling houses, clothes and other commodities and even necessities which are consumed for the purpose of enjoyment, not of production.²⁴

He divides capital into material and immaterial: the immaterial consisting of knowledge and skill; the material, of tools, manufacturing buildings, raw or unfinished materials, and money when in the hands of a person who intends to employ it in the purchase of materials or tools.²⁵

He excludes the necessities consumed by the productive classes, considering them, like Adam Smith, as a part of the stock reserved for immediate consumption. Whether he classes under capital finished commodities, incapable of being used reproductively, but still in the hands of the maker or shopkeeper, does not appear. But as he considers all raw materials in the manufacturer's hands as capital, he can scarcely refuse that name to the manufactured article. If the rough diamond in a jeweler's workshop is capital, a diamond ring in his show shop must be capital too.

The only Spanish economist with whose works I am acquainted is *Florez-Estrada*, translated by Galibert in 1833.

He divides wealth into three species: capital, the fund for immediate consumption, and stationary wealth (*richesse stationnaire*); and defines capital to be wealth profitably employed in reproduction.²⁶ He includes under it land, knowledge and skill, all brute and inanimate instruments, materials, finished commodities unsold, and the fund which supports laborers.

Stationary wealth consists of commodities of slow consumption, not employed productively such as the pictures, statues, jewels, and furniture of a man who does not trade in such commodities.

The fund for immediate consumption consists of the wealth of quick consumption used by the unproductive members of society.*²⁷

5. The German Viewpoint. I now come to the Germans.

Storch defines capital as accumulated wealth employed in material production. He excludes therefore land, treating it as a separate instrument of production. He excludes also knowledge and skill of which he treats separately as species of the genus *biens internes*, a classification on which I shall remark thereafter. The things which he includes under capital he subdivides into the following six species:

- (1) Permanent improvements of land.
- (2) Buildings for the purpose of production or for the dwelling of producers.
- (3) Tools.
- (4) The subsistence of producers.
- (5) Materials.
- (6) Finished work not in the hands of its ultimate consumers.

All other wealth he designates as the fund for immediate consumption.²⁷

Rau, as I have already mentioned, follows the old distribution of the instruments of production into land, capital, and labor. Excluding from capital, land, he excludes therefore all improvements of land, as incorporated in the land, and excluding the human faculties he excludes also, and on the same ground, knowledge and skill.

He defines capital as a provision of movable instruments of profit;²⁸ and subdivides it into six species:²⁹

- (1) Materials to be converted into finished goods (*Verwandlungstoffe*).
- (2) Materials to be consumed in that conversion (*Hülfstoffe*), such as the fuel of a steam engine.
- (3) The subsistence of the laborers.
- (4) Tools.
- (5) Finished wares (*Waaren*).
- (6) Money.

The clearest and most concise definition of capital which *Hermann* has given is to be found in a review of my outline of *Political Economy* which he has inserted in the *Gelehrte Anzeigen* of Munich, Nos. 155 to 161, inclusive.

That part of a man's property, says Hermann, which gives to him a permanent utility, capable of being exchanged is capital. If the utility be directly enjoyed by the possessor, as in the case of a house inhabited by its owner, he terms the capital *Nulz-Kapital*, which may be translated capital of enjoyment. If it be employed in producing something else, he terms it productive capital. The productive capital which retains its form and disappears only by gradual wear and tear is fixed capital. That which changes its form and is consumed not in itself but in its products is circulating capital. Under fixed capital he includes land, and immaterial advantages, such as the goodwill of a shop, a copyright or a mechanical process protected by patent or secrecy.

But he excludes knowledge and skill, considering them as qualities of his second instrument of production, man. I cannot clearly infer from anything contained either in the review or in his great work, *Staatswirthschaftliche Untersuchungen*, whether he considers the subsistence of the laborer when in the employer's hands, such as the provisions in a merchant ship, as capital or not. The laborer's subsistence when in his own hands he excludes,³⁰ reckoning it under the stock of immediate consumption (*Verbrauchsvorrath*).^{* 38}

CHAPTER II

BASIC PRINCIPLES GOVERNING THE CLASSIFICATION OF THE SPECIES OF CAPITAL

1. How to Determine whether a Product Is Capital or Not. 2. Why Knowledge, Skill, and Special Advantages Are Excluded from Capital. 3. Why Necessaries of Life Should Be Considered Capital. 4. The Distinction between Fixed and Circulating Capital. 5. Summary and Conclusion.

1. How to Determine whether a Product Is Capital or Not. The last chapter contained a statement of the definitions of capital adopted by some of the most eminent political economists who have written since the publication of the *Wealth of Nations*.^{* 89} [It will be noted that] there are two classes of objects which every economist considers as capital, [namely], tools and materials; and that some economists confine that name to these objects. James Mill's definition "something produced for the purpose of being employed in further production" and Lord Lauderdale's "the means of supplanting human labor and of performing labor exceeding the personal powers of man" are examples.

I have already remarked the inconsistency of including in capital materials and excluding finished articles—of including the diamonds and the golden hoop and excluding the diamond ring that is formed out of them. To which it must be added that finished commodities in the shop of a dealer are in fact productively employed. They have a higher value in the shop than anywhere else. If they had not, the shopkeeper would have no profit. What he buys from the manufacturer or importer for £90 he sells perhaps for £100. And if the purchaser were the next day, or the next minute, to attempt to resell his purchase, he probably would not get for it more than £70 or £80. The reason is obvious. Goods in a shop are exposed for sale in the place and in the quantities which suit the convenience of the purchaser. He is saved the expense of finding out the original maker or importer, he has the opportunity of choosing from a various stock. These advantages give to the goods in a shop their peculiar value—a value, as I have already remarked, higher than

that which they possessed before they entered the shop, and also higher than that which they will possess as soon as they quit the shop.

The economists who extend the word capital to all products possessing value, among whom are Dr. Hamilton and the American writers—Carey, Tucker, and Wayland—fall into an opposite error. Their definition is as much too wide as that of the former is too narrow. We have already a term, wealth, to express such products. To give the same signification to the word capital is to destroy the usefulness of that word, and the nomenclature of political economy is not rich enough to be able to part with one of its terms.

Each of these two classes of definitions appears to have been influenced by the opinion expressly maintained by Mr. McCulloch that the question, whether a given commodity³¹ ought or ought not to be classed under the head of capital, depends on the *intrinsic qualities* of that commodity, not on the *use* which is made of it.

It is always (says Mr. McCulloch) extremely difficult to say when stock is, or is not, productively employed; and any definition of capital which involves the determination of such a point, can serve only to embarrass and obscure a subject that is otherwise abundantly simple. In our view of the matter, it is enough to entitle an article to be considered capital, that it can directly contribute to the support of man, or assist him in appropriating or producing commodities. It may not, it is true, be employed for either of these purposes; and though it were, it might not be employed so as to produce the anticipated results. But the question as to the mode of employing an article, and the consequence of that employment, are perfectly distinct from the question, whether that article be capital. For anything that can *à priori* be known to the contrary—a horse yoked to a gentleman's coach—may be as productively employed as if he were yoked to a brewer's dray; but whatever difference may obtain in the cases, the identity of the animal is not affected: he is equally possessed in the one and the other, of the capacity to assist in production; and should therefore be regarded, independently of other considerations, as a part of the capital of the country.

But when we come to apply this definition, we find that it includes commodities which do not produce the effects attributed by Mr. McCulloch to capital. Those effects are four: first, that it enables labor to be divided; second, that it enables work to be executed which could not be performed without it; third, that it saves labor; and fourth, that it enables work to be executed better and more quickly.³²

Buckwheat is included in Mr. McCulloch's definition of capital. It is applied directly to the support of human beings in a great part of Europe. But how does the buckwheat which an English nobleman grows to feed his pheasants, perform the offices of capital? How do the 1,500 horses that we see every summer's evening in Hyde Park, assist in the division of labor, or in the execution of work, or in the economizing labor, or in rendering it more efficient? It is quite true that neither the identity nor the capacity of the horse is affected by the use that is made of him, but whether he be, or be not an instrument of production depends on that use, and on that use only.*⁹⁰

It will be [further] observed that commodities of unproductive, but slow, consumption are excluded from capital by all the English School; but are admitted by J. B. Say, by Ganihl, by Florez-Estrada, and by Hermann. The question is one of considerable difficulty.

The objections to a classification depending on comparative terms are obvious. No line can be drawn separating the commodities which are *slowly* from those which are *rapidly* consumed. There are, indeed, a few things which are indestructible, except by violence or gross neglect. Such are coins, and gems, and marbles. We have statues, 2,000 years old, as perfect as when they left the sculptor's hands, and there is no reason to suppose that they will be deteriorated 2,000 years hence. But these commodities are too few to make a class, and as to all others Adam Smith says truly, that their period of total consumption differs only in being more or less distant.

On the other hand to exclude, as Adam Smith does, from capital the whole stock of dwelling houses in a country, is inconsistent with his including under that term the materials of such houses while incomplete. If a carcass is capital the finished house when in the builder's hands must be capital also. If it is a part of his capital while unlet, it can scarcely be said to cease to be capital when he lets it. Does it cease then to be capital as soon as he sells it? The distinction is almost arbitrary, but I think we must hold that it does cease to be capital if it be purchased for the purpose of residence; just as a cigar is capital in the tobacconist's shop but ceases to be so as soon as it has been purchased by the person who intends to smoke it. If however the house be purchased or employed not for the purpose of residence but of profit, by letting, or again selling it, it retains or resumes the character of capital; just as a stock of cigars purchased for the purpose of consumption, and therefore withdrawn from capital, becomes again capital if the purchaser

resell it to the tobacconist. It is obvious however that immovables cannot like movables acquire value by being exposed for sale. It is seldom therefore that we find a dealer in houses, that is to say, a person who makes a profit by purchasing them for the purpose of resale. The only great house proprietors are builders, and their profit arises from the comparative cheapness with which many houses may be built at one time by a mass of capital managed by a single mind.*⁹¹

2. Why Knowledge, Skill, and Special Advantages Are Excluded from Capital. One of the questions on which political economists most differ is, whether knowledge and skill are or are not to be considered capital. They are wealth employed in production. And if I agreed with Mr. McCulloch in considering man as capital, I should consider these qualities as a portion of human capital. They are so in slave countries, *i. e.*, in countries in which man is property.

I have already shown that land cannot be conveniently excluded from the term capital. If man is also to be included in it there is but one instrument of production, namely capital, and wages and rent are mere species of profit.³³ It appears to me that this classification and nomenclature would be inconvenient. It seems to me that man, as the intelligent instrument of production, is an instrument differing in kind from brute and inanimate agents; that his existence and his increase are the results of causes differing from those by which they are produced and augmented; that most of the services which he performs are such as they cannot effect, and that the reward which he receives is governed by principles differing from those which regulate the remuneration paid for their use. On these grounds I consider knowledge and skill not as capital, and productive of profit, but as qualities of man, and therefore productive of wages.

Professor Hermann, though he excludes knowledge and skill, which have usually been termed immaterial capital, admits the existence of such a capital, and considers it as consisting of the advantages derived from social relations—such as a goodwill or patent right. I do not consider such advantages as even wealth, for though they may be profitable to their owner, they are at least in an equal degree, and often to a much greater degree, detrimental to the rest of the community. The goodwill possessed by one shop, to an equal extent, deprives other shops of custom. The privilege of a patentee excludes all other producers from the use of an advantageous process. Professor Hermann properly excludes credits from capital, on the ground that whatever they

add to the property of the creditor they take from that of the debtor.³⁴ The same reasoning applies to the sources of profit in question.*⁹²

3. Why Necessaries of Life Should Be Considered Capital. Another point on which [economists] differ, is the admission or rejection of the necessities consumed by the productive classes. Adam Smith excluded³⁵ them from capital, as soon as they reached the consumer's hands. He classed them then in the stock reserved for immediate consumption. The majority of his successors have left the question untouched. Most of those who have considered it have included these necessities in capital. Two writers however of great eminence, Mr. Malthus and M. Rossi, follow Adam Smith.

The only productive capital (says Mr. Malthus) properly so called, is the consumption or destruction of wealth by *capitalists* with a view to reproduction. This is the only marked line of distinction which can be drawn between productive and unproductive consumption. The workman whom the capitalist employs consumes that part of his wages which he does not save, as revenue, with a view to subsistence or enjoyment and not as capital with a view to production.³⁶

Mr. Malthus would admit that the coals in the furnace of a steam engine are productively employed, because their consumption is the necessary condition to the engine's performing its work. And in what does the consumption of food by a laborer differ from that of coals by a steam engine? Simply in this, that the laborer derives pleasure from what he consumes, and the steam engine does not. If a laborer were so constituted as to feel no craving for food, and no gratification from eating, and were reminded of its necessity only by the debility consequent on its want, would not his meals, taken as they would be solely to enable him to undergo his fatigues, be productively consumed? Nature has wisely enforced an act of daily necessity by the stimulus of hunger, and the reward of enjoyment, but do that stimulus and enjoyment detract from its productiveness? Is the plowman's dinner less the means of his toils because he considers it as their end? Is not the food of working cattle productively employed? Does not the owner of a West Indian estate consider the supplies which he sends to his slaves as a capital destined to productive consumption?

M. Rossi attaches to the question a moral importance which I cannot find in it. He says that the wages of the laborer, whether

paid in money or in necessities cannot be treated as capital "without removing man from the position which his noble nature has given to him in creation."³⁷ He extracts the passage [from my outline of *Political Economy* published in the *Encyclopedia Metropolitana*] in which I remark the analogy between the coals of a steam engine and the food of a laborer.

This (he says) is the result of a philosophy which pretends to be the philosophy of the liberty and the dignity of man. It leads us to talk of man as he was talked of by the Greek or Roman slave holder, as an animal or a thing. A steam engine is merely an instrument, if it does not pay for its coal it is broken up. Man is the object of his own exertions, he is no instrument, he does not produce for the purpose of producing. The world, happily, is not a treadmill of which man is the moving power. What is the meaning of this constant comparison, against which my voice shall ever be raised, of man to a horse or a steam engine, and of his daily wages to the feed of corn or to the bushel of coals?³⁸

After this declamation, which I fear was a claptrap addressed to a democratic and not very logical audience, he proceeds to state the ground on which he excludes from capital the necessities which the capitalist advances, in kind or through money, to the laborer. This ground is that if the laborer possessed himself necessities sufficient to support him until the completion of his work, no such advances need be made by the capitalist. This is true, but in that case the laborer would himself be a capitalist.

In many countries he is so. The situation of the poorer English or Scotch laborer, who has no store beyond his immediate wants and lives therefore on his wages from hand to mouth, often perhaps owing a week's wages to the village shopkeeper, is an exception to that of the agricultural laborers in the rest of Europe. It is, without doubt, the ordinary condition of the laboring population of towns. In a town want of room makes it difficult to keep a large stock of clothes, provisions, and fuel, and the facility of purchasing them renders it unnecessary. But in the country, where there is space enough to hold them, where they are not always on sale, and where the laborer can often produce them more cheaply than he can buy them, he has generally a considerable stock. An Irish cottier thinks himself in danger of starvation if his potato pit in August does not contain food for his family till the August following. The Swiss peasant has a provision of potato flour and dried fruit which will last him for more than a

year. Even the English laborer, though among the most improvident of his class, has often his flitch of bacon and his coal stack. Now if these stores were in the hands of the employer intended to be given by him to his laborers in return for their work, in other words, if the laborers were paid in kind and these stores were set apart by their owner for that purpose, they clearly would be called capital. M. Rossi would probably admit that the stores of a merchant ship which are to be issued in daily rations to the crew are capital. Why then do they cease to be capital if they are accumulated not by the employer, but by the laborer himself? They are capital in the hands of the capitalist because they are used by him productively in the purchase of labor. They are also used productively by the laborer, for without them he could not retain the health and strength necessary to his work.

If the classification which excludes them from capital be adopted this curious consequence follows, namely, that if a capitalist employ nine laboring families and pay them in kind, and keep by him a stock of provisions sufficient for their use and that of his own family, nine-tenths of that stock, namely the portion with which he pays his laborers are capital, the remaining tenth that which feeds his own family is not, and yet the latter is as productively employed as the former.

I extract from Mr. Pym's work on *The Conditions and Prospects of Ireland*, p. 124, a passage which shows that the destruction in 1847 of the food accumulated by the Irish laborers was in fact a destruction of capital.

Potatoes (says Mr. Pym) were not merely the food of the people of Ireland; they were the capital which enabled the poor cottier to exert his industry. Stored up for winter food they enabled the small farmer or the cottier to feed cattle and pigs, to rear poultry, to trade in short as if he had possessed so much capital. With them the farmer paid the wages of his laborers, whether farm servants or cottiers. The loss of potatoes depriving the poor man of his capital paralyzed his industry. He could no longer feed pigs or poultry, or even cultivate his farm, because he had nothing to live on in the mean time. The same cause in many instances obliged the farmer to dismiss his servants and deprived him of the assistance of laborers whom he could no longer employ having no money to pay their wages, and the old arrangement of potato ground in lieu of wages having become valueless. To supply this want, and enable the usual operations of the country to be carried on would have required the introduction of a considerable amount of capital.* 93

4. The Distinction between Fixed and Circulating Capital. Adam Smith, as we have seen, divided capital into fixed and circulating; and gave the name of fixed capital to the things which yield a revenue without changing masters, and the name of circulating to the things of which the profitable use is to part with them.

That Adam Smith's division of capital into fixed and circulating is based on a real and important distinction may be inferred from the currency which those words have obtained. Every manufacturer, however little he may know of Adam Smith, talks of his fixed and of his circulating capital. But though these terms have passed into general use, the meaning affixed is not always the same, or indeed always precise.

Mr. Ricardo, with an inattention to established usage which much diminishes the usefulness of his writings, has used the terms fixed and circulating capital in a totally different sense. In this he has been followed by Mr. James Mill and by Mr. McCulloch, and as neither of these writers intimates that his use of the words is not the common one it may be well to mark the difference.

According as capital is rapidly perishable (says Mr. Ricardo) and requires to be frequently reproduced, or is of slow consumption, it is classed under the heads of circulating or of fixed capital—a division not essential and in which the line of demarcation cannot be accurately drawn. A brewer whose buildings and machinery are valuable and durable, is said to employ a large portion of fixed capital; on the contrary, a shoemaker, whose capital is chiefly employed in the payment of wages which are expended on food and clothing—commodities more perishable than buildings and machinery—is said to employ a large portion of capital as circulating capital.³⁹

Mr. Ricardo might well remark that the line of demarcation between his two sorts of capital cannot be accurately drawn; for what can be more vague, or more void of positive meaning, than such comparative terms as slow and rapid? The singular circumstance is that both he and Mr. Mill and Mr. McCulloch should have supposed—and it appears clear that they did suppose, that their division followed that of Adam Smith. It is obviously a cross division. The master tailor's needles which Adam Smith selects as an example of fixed capital, because the tailor retains them, would according to Mr. Ricardo, be circulating because they are perishable. On the other hand the materials and stock in trade of an iron founder would be circulating capital according to Smith and fixed according to Ricardo.*⁹⁴

Even Adam Smith appears to have been misled by the rapid consumption of some kinds of capital. "The maintenance" (he says) "of a farmer's working cattle is a circulating capital since the profit is made by parting with it. His seed is a fixed capital; though it goes backwards and forwards between the ground and the granary, it never changes masters, and therefore does not properly circulate." Now the oats with which a farmer feeds his horses change masters as little as the oats which he puts into the ground. Each, to use his own expression, "yields a revenue or profit without changing masters and therefore may properly be called a fixed capital." *⁹⁵

The difference between fixed and circulating capital seems to consist not in their respective durability, but in the period for which each is retained by the capitalist. The capitalist retains the one for as long and the other for as short a time as possible. The cotton spinner, if he could would keep his machinery all his life, he would be glad to work up his cotton and sell the produce once a fortnight or if possible once a day.

I am inclined to think that this transitoriness of possession mainly governs the unscientific world in terming any given article of capital fixed or circulating. The coals used in the steam engine of a cotton spinner are according to Adam Smith's division fixed capital. The spinner does not part with them. He uses them just as he uses the steam engine which they feed, for the purpose of producing an effect, and uses them as slowly as he can. But as he purchases them only as he wants them, and seldom retains them for more than a few weeks or days, they would in ordinary language be called circulating capital.*⁹⁶

Admitting the inconvenience of adopting definitions which coincide perfectly neither with those used by Adam Smith, nor with ordinary use, I think that the best definition of fixed capital will be to restrict it to instruments, and the best definition of circulating ⁴⁰ capital to confine it to materials.*⁹⁷

[In a former chapter I remarked that] many things may be used indifferently as either commodities, materials, or instruments. Things used as materials or as instruments are of course used as capital, that is to say, productively. Commodities may be used either productively or unproductively. When in the hands of those who intend to consume them for the mere purpose of enjoyment or comfort, they are used unproductively. When in the hands of those who employ them for the purpose of sale or hire, or to

support themselves in the health and strength necessary for production, they are used productively.

In a rich country which is able to avail itself of the advantages arising from the division and combination of labor nearly the whole of the commodities are, when first produced, used productively. Scarcely any one produces for the purpose of his own unproductive consumption. The horses and deer which an Englishman of fortune breeds for his own saddle or table, the tobacco which the Belgian peasant plants for his own pipe, the pictures which an amateur paints for his own walls are among the few instances which occur to me. All the rest, except the very small portion which the productive classes produce as necessities for themselves, such as the potatoes grown in his garden by a laborer, are produced for the immediate purpose of being sold or let.

If we examine the details of the capital of a great glassmaker we shall find that a part of it consists of the land occupied by his works or subservient to them; the stream which supplies them with water; the buildings in which the materials of his manufacture are melted into glass, then cast, annealed, ground, polished, smoothed, silvered, and exposed to sale; the houses or apartments which are occupied by the principal officers of the establishment and by the more confidential workmen; the pots, furnaces, tables, ovens, steam engines, polishing benches, and smaller tools; emery and sand which are employed in the manufacture; and the coals which give heat to the melting furnaces and to the boilers of the steam engines.

All these are mere instruments. They are used by the manufacturer merely for the purpose of producing the commodity in which he deals. He never parts with them, but wears them out, as slowly as he can, in his service.

Another portion of his capital consists of the soda and silix of which his glass is made, the quicksilver with which it is silvered, and the finished glass which forms the stock to meet the demands of his purchasers. Of this he retains no portion permanently, and it is against his will that he retains any part even temporarily. He is constantly striving to shorten the interval between the entry of his materials and the departure of his finished work. His *beau idéal* would be that all the soda, silix, and quicksilver that he purchases to-day could be sold as silvered glass to-morrow.

The remainder of his capital consists of the money which he finds it necessary to keep in his countinghouse or at his banker's

for the purpose of paying his workpeople, and purchasing his own subsistence and his instruments and materials. This also he wishes to retain for as short a time as possible. The less money which he thus keeps and the shorter time that he keeps it idle the better. If the expenses of his business could be paid day by day just as they arose out of the money which he receives day by day from his customers, he would save altogether the interest on this part of his capital.

It will be observed that between that part of the capital which consists of instruments, and that which consists of materials, commodities, and money, there are three material differences.

The former is used, the latter is parted with; the former is kept for as long, the second for as short a time as possible; the greater part of the first may remain unaltered for an indefinite time—some of it, such as the land, forever, all the last is constantly changing: every day, indeed every hour, some of the materials are converted into commodities, some of the commodities into money, and some of the money into materials and services. The former, therefore, is called *fixed*, the latter *circulating* capital.

It will be observed that I have not included in the manufacturer's capital any provision of necessaries for himself or his workpeople. In a comparatively unadvanced state of society it would be necessary to have a provision of such articles, but in a commercial country they are represented by the moneyed capital, out of which the capitalist defrays his own subsistence and pays to his workmen the wages out of which they defray theirs.*⁹⁸

5. Summary and Conclusion. The most convenient extent to be given to [capital] has been a matter of long controversy. All economists have agreed to give the name of capital to all the tools with which the laborer works and to all the materials on which he is employed, so far as those tools and materials are the results of previous labor. But there their concurrence ends. The principal questions which have divided them have been [as follows:]

1. *Whether the word capital ought to include knowledge, skill, and other personal qualities.*
2. *Whether it ought to include land and the other agents spontaneously supplied by nature.*
3. *Whether it ought to include things of slow consumption, when not used productively, such as a palace with its pictures, its furniture, and its jewels, when in the owner's occupation.*
4. *Whether it ought to include things incapable of reproductive use,*

when in the hands of those who use them commercially, such as the jewels in a goldsmith's shop.

[5. *Whether it ought to include the necessities consumed by the productive classes.*]

I have thought it advisable to exclude from capital personal qualities, such as knowledge and skill on the ground that they are mere attributes of a distinct instrument of production, *Man*.^{* 99} I have also excluded the advantages which are enjoyed by one man at the expense of another, such as a debt, a secret, or a privilege, because the advantages which they give to their possessor are at least counterbalanced by the disadvantages which they occasion to others.

I have excluded commodities unproductively used when in the hands of their unproductive consumers,⁴¹ such as the diamonds of a lady, the pictures of an amateur, and the wine in a college cellar, on the ground that to include them under capital would make capital and wealth synonymous, and render unintelligible the well-established distinction between a man who spends his income and one who spends his capital.^{* 100} Things which may be used either productively or unproductively, such as a park or a hunter, or which are incapable of reproductive use, such as a pearl necklace or a cigar, I consider as capital or not—not according to their intrinsic qualities, but according to the manner in which they are employed. The same ship may be used alternately as a merchant vessel and as a gentlemen's pleasure yacht. While used in the former mode it is capital, while used in the latter it is not.^{* 101}

On the other hand, I include under capital land and all other brute and inanimate agents which are capable of appropriation. The few which cannot be appropriated are excluded from capital because they are excluded from wealth. Some such as the elasticity of the atmosphere and the attractive force of the earth, are universally diffused and belong to the physical, not to the moral sciences. In their absence we could not produce, because, constituted as we are, in their absence we could not live; but they are conditions of *existence* not means of *production*. Others, such as the humidity of the Irish climate and the brightness of the sun in Provence, are instruments of production so far as they favor certain modes of production in certain districts. The former is peculiarly favorable to the Irish spinner, the latter to the French dyer.

Such peculiarities of climate, when they extend over a whole country, are circumstances favorable to the creation in that country of peculiar sorts of wealth. But as no one can be excluded from

their use, as every one who chooses to dwell in the country *must* enjoy them, and no one who dwells out of it *can* enjoy them, as they can neither be appropriated nor transferred, they are not wealth. If however they are qualities not of the whole country but of a portion of it, and that portion is so small that the bulk of the inhabitants are excluded from their use, they are wealth, because they are susceptible of appropriation and transfer.

From Mayence down to Coblenz the slopes which form the right side of the valley of the Rhine are worth five or six or sometimes ten times as much as those on the left. As the river runs west they have a southern exposure, while the left bank is almost always in shade. They enjoy therefore a climate several degrees warmer, and are covered with vines, while the left bank is generally in forest. If a change in the climate of Europe were to give to all Germany the temperature now prevailing in the Rheingau, that district would no longer possess peculiar advantages and its soil would lose its peculiar value. But these advantages being inseparable from the land which enjoys them, are qualities of that land, not a separate species of capital.

Of course I follow all my predecessors in including under capital all tools and machinery, and all unfinished materials of production. I follow also the great majority of economists in including all finished commodities when in the hands of those who deal in them. Such commodities acquire from that circumstance, as I have already remarked, a peculiar value. Nor is this confined to new commodities. The secondhand clothes in the Monmouth Street shops and cellars are more valuable than they were when the old clothesman purchased them, and than they will be in the hands of those to whom he will sell them. Their collection and exposure for sale is a productive use of them and therefore entitles them, while so used to the name of capital.

I include also the provision of necessities ⁴²—of food, clothing, lodging and fuel—in the hands of the productive classes.

Adam Smith seems at first sight not to have quite decided whether he should class these things as capital or as stock reserved for immediate consumption. The passage with which he prefaces his explanation of capital leads the reader to expect to find them there included in it.

When the division of labor (he says) has once been thoroughly introduced the produce of a man's own labor can supply but a very small

part of his occasional wants. The far greater part of them are supplied by the produce of other men's labor, which he purchases with the produce, or what is the same thing, with the price of the produce of his own. But this purchase cannot be made till such time as the produce of his own labor has not only been completed but sold. A stock of goods of different kinds, therefore, must be stored up somewhere sufficient to maintain him, and to supply him with the materials and tools of his work, till such time at least as both these events can be brought about. A weaver cannot apply himself entirely to his peculiar business unless there is beforehand stored up somewhere, either in his own possession or in that of some other person a stock sufficient to maintain him, and to supply him with the materials and tools of his work, till he has not only completed but sold his web. This accumulation must evidently be previous to his applying his industry for so long a time to such a peculiar business.⁴³

From this passage it might be plausibly inferred, that the fund stored up to maintain the laborer during the progress of his work is capital. And when Adam Smith describes the circulating capital of a farmer he includes in it the wages and maintenance of his laboring servants. But when he comes to divide stock into capital, and the provision for immediate consumption he excludes from capital both the subsistence which the capitalist reserves for his own use and that which the laborer keeps by him for the same purpose.

Adam Smith however is not really inconsistent. The differentia which he adopts as marking whether a given commodity is to be termed capital or stock intended for immediate consumption, is its being employed, or not being employed for the direct purpose of procuring a profit to its employer. He includes therefore under capital the wages and maintenance given by the farmer to his laborers. They are employed by the farmer in the same way as the food of his laboring cattle. He expends them for the direct purpose of obtaining a revenue by that expenditure.

But the necessities which the capitalist consumes himself are consumed with no direct purpose of profit. Their consumption without doubt is a necessary condition to his continuing to act as a capitalist, and consequently to his obtaining profit, but that is not the direct purpose for which he eats and drinks. Again the laborer consumes for the direct purpose of satisfying his own wants or his own desires. That he must eat if he is to earn wages is true, but it is not for the purpose of earning wages that he eats. Con-

fining the word capital to the things which are employed for the purpose of obtaining a revenue Adam Smith properly excluded from capital things employed to satisfy the wants or desires of the employer.

But this defense is not open to the economists whose definitions of capital are not founded on the same differentia as that adopted by Adam Smith.

M. Rossi, for instance, as we have seen defines capital to be "the portion of wealth which is destined to reproduction." Nothing is more productively used than the subsistence which keeps the laborer and the capitalist in the health and strength which are necessary to enable them to take their respective shares in the business of production. And as I define capital with reference not to the revenue which it procures but to the assistance which it affords, I include under capital the subsistence of all those who are engaged in production, whether that subsistence be in their own hands or in those of their employer.

But of course it is only the *necessary* subsistence which is capital, since it is only the *necessary* subsistence which is productively used. The gin and the tobacco of the artisan, the La Fitte and Johannisberg of the merchant, are used by them not for the purpose of production but of enjoyment. They are not capital but stock reserved for unproductive consumption.

Having now enumerated all the species of capital, I am in a situation to define the genus, and my definition is, *material wealth employed productively*.* ¹⁰²

CHAPTER III

NATIONAL CAPITAL: ITS NATURE, MAGNITUDE, AND PURPOSES

1. Private vs. Public Property Rights. 2. The Classes and Volume of Public Property. 3. Efficiency of Capital Employed in National Defense. 4. Efficiency of Capital Devoted to Popular Education.

1. Private vs. Public Property Rights. "The general stock of any country or society," says Adam Smith, "is the same with that of all its inhabitants or members."⁴⁴ This is not accurate. The wealth of a nation without doubt comprehends the wealth of all its members, but it comprehends a great deal more. There are in every civilized country many things of great value and utility, both for the purposes of enjoyment and of production which have no private owner. Such things when used productively constitute national capital as distinguished from private capital.*¹⁰³

The greater part of the property of a country is vested in its owners, whether in possession or in reversion solely for their own benefit. All this is private property.*¹⁰⁴

A considerable amount of property is vested in the nation, or in the sovereign, as representing the nation; and a considerable amount is also vested in corporations or trustees for purposes in which the public is more or less interested. Of this public or partly public property, a portion—such as the palaces and parks which, though royal, are untenanted by royalty, the almshouses and foundations on whose inmates no duties are imposed—is employed unproductively, and therefore need not now be considered.

Of the remainder, part is directly vested in the sovereign—such as highways, harbors, customhouses, barracks, forts, dockyards, and military works. Another part is vested in trustees who have no beneficial interest, and merely represent the public. This is the case with respect to the British Museum and the National Gallery.

In others again, the property belongs beneficially to the person for the time being in possession but it is his—not, like the estate of an individual, merely for his own pleasure—but to enable him to

perform certain duties; and, subject to his official tenure, the reversion is in the state. The Archbishop of Canterbury has Lambeth Palace and £15,000 a year—not for the sake of the existing archbishop, but because Lambeth is thought to be a proper residence and £15,000 a year a proper revenue for the Primate of all England.*¹⁰⁵ [So] the income of the Master of the Rolls is derived from the Rolls estate. The Master of the Rolls for the time being receives the rents, and applies them to his own purposes; but they are given to him not for his own sake, but for that of the public. It is thought advantageous to the public service that the second judge in equity should have an income of £7,000 a year, and the rents of this estate are supposed to form a convenient source. The interest in possession is the private property of the Master of the Rolls; the reversion is public property. It is vested in the crown as trustee for the nation.*¹⁰⁶

As the marks which distinguish public from private property are not recognized so clearly as the importance of the subject requires, I shall illustrate them at some length.

[As is generally known], property implies distinct classes of rights. With respect to time a right may be present or future. With respect to extent it may be limited or absolute.

The distinction between present and future rights, or, as they are frequently termed, rights in possession and rights in reversion, does not require explanation. That between limited and absolute rights is less obvious.

An absolute right to property seems to me to include the following three powers: first, a power to exclude from it all others; secondly, a power to use it in any way not injurious to others; and thirdly, a power to alienate or, in other words, to transfer these powers to another.

At first sight it may appear that absolute property implies also a fourth power, namely one to regulate the devolution and employment of its subject after the proprietor's death. There are several reasons, however, for holding that posthumous power is not an incident to property, but the creation of positive law.

In the first place, it exists only in derogation of the right to enjoy the earth and all that it contains, which every successive generation of mankind seems to receive from nature. In the second place, it varies according to the municipal law of every country. In England a man may for all purposes entail his property after his death for a life or lives in being and 21 years afterwards, and may

dedicate it forever to charitable purposes. In Scotland he can entail heritable property forever and for all purposes. In France he can sell, but has very limited power by gift or by will against his children, or even his remoter relations. On his death they necessarily take at least one-half of his property, and in many cases a much larger share. In Turkey neither devisee nor heir has any claim. The law gives the whole to the Sultan, though in ordinary cases the greater part of it is retained by the family.

Obvious inconveniences attend each extreme,—both the Scotch law, which if it be not soon altered will confine the ownership of land to a small hereditary unchangeable caste, and the Turkish which checks the creation of capital and makes the existence of an aristocracy impossible. But under the Turkish system what may be called the natural rights of property are not violated. The owner enjoys it all his life. The right to say who shall enjoy it after his death may be a useful, but is clearly a separable, adjunct. The Scotch system really *is* a violation of natural rights. When Adam Smith wrote about one-third of the land was under perpetual entail. Two-thirds are supposed to be so now. In the next century this may be the case of the whole. The thousands who will then be the owners of the land will be unable to part with it, the millions who will not be its owners will be unable to acquire it. The caprice of those who live now, or who lived during the two last centuries will regulate the enjoyment and devolution of the property of their remotest successors. This is really making the land belong not to the living but to the dead.

But if we hold any posthumous power to be a natural incident to property there seems to be no limit, short of the Scotch system, at which we can stop. A testator has as much natural right to govern for 1,000 years after his death as for one.* ¹⁰⁷

Again the state cannot interfere with private property without purchasing it at its full value. It must pay for the whole fee simple—for the interests in reversion as well as for those in possession. When the state interferes with public property, it need purchase only the interests of those in possession and with defined and appreciable expectations of succession. For the interest in reversion, that is to say, the interest which remains after the deaths of all who have present rights or definite and appreciable expectations of succession, belongs to it already. If it were thought expedient that the office of Master of the Rolls should be abolished, and the income of the Rolls estate carried over to the consolidated fund, no

one but the existing Master of the Rolls would have a claim to compensation. No one else could show that he received a specific or appreciable detriment.

The last mark of public property is the want by the person in possession of a full ⁴⁵ power of alienation.* ¹⁰⁸ A bare trustee for public purposes is a mere instrument, and cannot refuse to obey his *cestuy que trust*. And where he has a beneficial interest, during his office, but no power to appoint a successor, the state, as the general owner of what has no other owner, is the owner of the reversion; and, as soon as the office becomes vacant, may acquire the possession of the property simply by not filling it up. It was in this way that the state acquired possession of the ten Irish bishoprics, suppressed [in 1832] whose revenues it now employs in relieving the people of Ireland from church cess.

But when the persons in possession can appoint their successors, as in the case of a college, they are in fact owners of the reversion. Their ownership may not be unqualified—they may be subject to certain duties during their incumbency, their choice of their successors may be more or less restricted; but they are the owners, and the state cannot acquire the property except on the terms on which it can acquire any property whatever, namely, by showing that the convenience of the public requires it, and on payment of an ample compensation. In the case of a corporation aggregate this could be easily provided by forbidding vacancies to be filled up, and allowing the existing corporators to divide between them the whole revenue. It was in this way that the Jesuits College was extinguished in Canada. The survivor enjoyed for several years a princely income.* ¹⁰⁹

2. The Classes and Volume of Public Property. The purposes to which the national capital is applied are the assistance of production directly or indirectly. Direct assistance is given by roads, bridges, harbors, post offices, packets, mints, customhouses, and the other kinds of capital which the government itself employs productively. The national capital employed in affording indirect assistance to production is that which supplies protection and instruction.* ¹¹⁰

A. Directly Productive Property. [As regards the former class of national capital,] in different communities it differs much both in kind and in amount. In the infancy of political science it seems to have been generally believed that a government, like an individual, could obtain a profit by the employment of capital. It was believed

indeed that, by employing for manufacturing and commercial purposes its powers of legislation, it could obtain far greater profits than an individual, since it could prohibit all competition with its purchases or its sales. With this purpose every government has monopolized the coinage of metallic money, though some, among which is England, have in a great measure abandoned the hope of profit on it. Every government has monopolized the transmission of letters. In the greater part of the Continent the government monopolizes the manufacture and sale of tobacco.

The capital employed for these purposes is obviously national capital. Throughout Europe all the ordinary roads, and the greater part of the bridges are public property. In England the mere opening a passage between two thoroughfares and allowing its free use for even a short period is a dedication of it to the public, and deprives it of the character of private property. In Belgium nearly all the railroads are national property, and this is likely to be soon the case in France.

In general, however, the national capital which is directly productive is a small portion of the whole capital of a country. It is much smaller than the national capital employed for instruction and smaller still than that employed for defense. In France indeed an attempt was made to provide employment ⁴⁶ by the government at good wages and with easy work for all who were unable or unwilling to find private employers. If this scheme could have been carried on for any considerable time and to any considerable extent, it must have been supported by a very large national capital. In a few months, however, the expense was found intolerable and the government, by diminishing its offers and increasing its requisitions—by becoming a bad paymaster or hard taskmaster—confined the applicants for employment to the paupers of the large towns who could be set to work in stoneyards, or in moving earth for railways, and in similar occupations requiring cheap tools and materials, and therefore little capital except the maintenance of the laborers.* ¹¹¹

B. Indirectly Productive Property. [The second class of national capital, that which *indirectly* aids production, is used for the purposes of defense and of education.]

The portion of the capital of a country that belongs to its government, and is employed in protecting it against internal violence or fraud is not great. It consists of the buildings and furniture of its prisons and courts of justice. But that employed in protecting it

against foreign aggression is generally very large. It comprehends its fortifications, its docks, its ships of war, and the material of its army.

France is supposed to have spent in fortifying and arming a single town, more than twenty millions sterling. Now for twenty millions sterling three cities might be built even in England, where building is dearer than in any other part of the world, each accommodating well 100,000 persons. Twenty millions sterling, employed productively, and turned only once a year with a profit of only five per cent would give a gross annual return of twenty-one millions—a fund sufficient to support even in England more than 400,000 families or more than two millions of people, supposing each family to consist of five persons and to have an income of £50 a year. And yet the fortifications of Paris, extensive as they are, form a small part of the fortifications of France * ¹¹²—Paris is only one of more than 100 French fortresses. Smaller or less compact countries, like Holland or Belgium, which have a larger proportionate extent of frontier require a still larger proportionate amount of fortification. The fortresses in the British Islands are few, but those which we have scattered over the Islands of the Mediterranean, the Atlantic, and the Indian Ocean, are perhaps not much less numerous than those of France. If we add to these the capital invested in our fleets, and in the stores in the Tower, at Woolwich, and in the dockyards, we shall probably find the military capital of England to be second only to that of France.* ¹¹³

The amount of capital belonging to the state and devoted to the purpose of instruction ⁴⁷ differs widely in different countries. It depends partly on the extent of instruction that is enjoyed and partly on the degree in which that instruction is afforded by the state. In the United States of America the people are highly instructed. But there is not a single state in which the government interferes with religious instruction, and there are many in which it takes no part in secular education. The public capital, therefore, devoted to instruction is very small. On the other hand, among the republics into which Spanish America has split, both religious and secular instruction are provided by the state; but there is so little of either that the same result follows—a very trifling employment of public capital for those purposes.

In Europe for more than 1,200 years—from the fourth century until the sixteenth—only one form of religious instruction was permitted. A considerable property was vested for this purpose in the

government of every country and applied under its sanction by the clergy for the time being. Under such circumstances, the greater part of the expense of religious instruction was provided by a national capital. The Reformation did not produce an immediate alteration. The early reformers were as intolerant as the Papists. They seized the capital devoted to religious instruction and applied it to the diffusion of the peculiar form of Protestantism, which the government had adopted and forbade any other kind of teaching. In the seventeenth century toleration was introduced first into Holland and afterwards into England, and, with the exception perhaps of the states of the Church it now exists in every part of Europe.

In every country, however, some one form of belief (and, with a single exception, that of the majority of the people), has been peculiarly favored by the government; and its teachers have received or have been allowed to retain the whole, or nearly the whole, of the national property employed in the diffusion of religious instruction. The consequence is the existence in almost every country of a State Church and a body of dissenters; the former enjoying the use of the national capital, the latter providing out of its own resources all the expenses of religious teaching. There is probably more dissent in the British Islands than in any other portion of the world—more than half of the Scotch, seven-eighths of the Irish, and at least one-third of the English population are dissenters. Out of about thirty millions there are probably not fourteen who belong to the Protestant church of England and Ireland, and to the Kirk of Scotland.

The national capital employed in their religious instruction consists of the cathedrals and churches belonging to the Church of England and Ireland, and to the Kirk of Scotland, and of the estates belonging to the bishops and chapters. The aggregate cost of now providing them, if we had them not, could not be less than £150 millions.* ¹¹⁴

The national capital devoted in the British Islands to secular education is much smaller. Omitting [the property administered by the universities and their colleges ⁴⁸] on the ground that, though property subject to certain charges in favor of education it is not national property, there remain the endowed schools. The income of those reported ⁴⁹ on by the English Commissioners of Charities amounted to more than £300,000 a year. Four-fifths of this income must arise from land and houses, that being the general proportion which in Charities land and houses bear to other sources of income.

The value of the schoolhouses must be rather more—so that we may consider the annual value of the property thus devoted in England to secular education as not less than £500,000 a year.

I consider the whole of this as national property, since the trustees in whom it is vested have no beneficial interest and the masters are mere stipendiaries with no power to appoint their successors. I wish I could say that it was as judiciously employed as that which is applied to purposes of protection. Every ship in the royal navy contributes to maintain our naval supremacy; if she is found un-serviceable she is broken up. A large portion of our endowed schools teach hardly anything, and the majority of the remainder do not afford one-tenth of the education which their funds would enable them to impart. This unhappy difference arises from an adherence to precedent—the most servile, the most absurd, and I had almost said, the most mischievous of which any enlightened nation was ever guilty. According to the general law of England property belongs not to the dead but to the living. That law recognizes the right of successive generations to enjoy the earth and its fruits and allows any one who has appropriated a portion of it, to regulate its devolution and employment only during the life of a person in being at his death, and 21 years longer.

One exception only is made, and that respects charitable foundations. With respect to them a founder or donor is allowed to say how the property which was his during his life shall be employed for 500 years or for 1,000 years or for 10,000 years after his death. He may say what shall be done with it under social and economical circumstances totally different from any that he ever witnessed or anticipated. If the trustees have sufficient good sense to see that the regulations laid down by the founder have become mischievous, and sufficient activity to correct them, any parish attorney anxious for a job, may arrest their reforms by a bill, a petition or an information. It is vain that they urge that what are called abuses are in fact improvements; that they are such as the founder if he had lived in these times must have desired; that the objects which he had in view 400 years ago have ceased to be beneficial; or that the means which he has directed to be employed have ceased to be effective. The Court refuses to enter into these questions of expediency. Its duty, it says, is “to see that the will of the founder is adhered to.” He founded perhaps a grammar school in which ten boys were to be taught Latin. A commercial school has been substituted in which 200 are taught English. It is in vain that the neighbors

protest that they want a commercial school and do not want a Latin one; that they show that teaching ten boys Latin would cost more than teaching 200 English; that ten boys, or five boys, or two boys to whom Latin would be useful are not to be found in the district; and that there are 500 who wish to learn English. "All this may be very true," answers the Judge, (and Lord Eldon always seemed to delight in the answer) "but this Court has nothing to do with it. My duty is to carry into execution the trusts of the testator's will." ⁵⁰ And thus a property is frittered away sufficient, if it were tolerably administered, to render England, now perhaps the worst instructed Protestant community, the best educated kingdom in Europe.* ¹¹⁵

3. Efficiency of Capital Employed in National Defense. [The affording a community protection against] foreign or domestic violence or fraud is the most difficult, the most expensive, and the most useful of the functions of government. The other functions can be performed, though less efficiently and less conveniently, by individuals for themselves. They can provide their own instruction, they can provide their own roads, and canals, and money. But they cannot provide their own protection, even against internal enemies. A voluntary police, or a voluntary court of justice either becomes an instrument of oppression, like the Lynch law of America,⁵¹ or a mere amusement like the yeomanry of England. Against external enemies private exertion is absolutely powerless, unless in countries so difficult of access as to be unfit for the residence of civilized men, such as the roots of the Caucasus, or the deserts of central Asia.

On its government, therefore, every country must depend for protection and on the degree in which this protection is afforded depends mainly its wealth. I say *mainly* because there certainly are instances in which countries enjoying a full average amount of security have not obtained an average amount of wealth. Some of the provinces of the Austrian empire afford examples. Life and property are safe in Bohemia, and except on the occasion of Van Damme's irruption in 1813, which did not last a week, it has not seen a foreign enemy for the last century. Still, with a fertile soil and a fine climate it is poor. But this shows only that security will not give wealth, any more than pure air will give health; they are not causes but conditions. A considerable amount of industry is indeed not incompatible with general insecurity. The pressure of immediate want will urge a man to work hard in order to procure an

immediate supply, though he may not be sure that he shall be allowed to use what he has worked for. Nothing, [however], but a reasonable prospect of future enjoyment will induce a man to devote his labor to the obtaining distant results, or in other words, to create and amass capital. In a very insecure state of society, therefore, the accumulation of any considerable amount of capital is impossible. The insecure portions of Europe,—Spain, Portugal, Southern Italy, Sicily and Ireland—are all miserably poor. What wealth there is, is found in the towns where private individuals can most easily combine for their mutual protection. The same remark applies still more strongly to America.

In the United States security against violence was, until the unhappy Civil War which has desolated them since the year 1860,⁵² nearly perfect. No foreign enemy, unless provoked by the rude arrogance of a republican government, was to be feared; and if attacks were made on property from within, it was in the form of fraud—fraud which a powerful and intelligent judicial establishment was always on the watch to punish. Under such circumstances the wealth of the United States has increased with a rapidity and a steadiness unexampled in history.

In Canada security is less complete. Society is torn by violent factions. Civil war broke out only a few years ago, and for many years foreign war with a powerful enemy seemed imminent. The administration of justice, however, is firm and pure. The advance in wealth, though considerable, is much less than that of the United States.

Brazil is in no danger from foreign aggression. Many thousands of miles are interposed between her and any state which could venture to assail her. But she is subject to much internal insecurity. During the present [nineteenth] century she has had more than one revolution, and more than one civil war. The courts of justice are dilatory and corrupt. She has a large slave population rendered unusually dangerous by an active slave trade. The natural advantages of the country have enabled her to make considerable progress; but with a territory as large as Europe, and a soil and a climate far superior to those of the United States she certainly does not possess a twentieth part of their wealth. In proportion to her population she is far poorer than Canada, though the colonization of Canada began more than a century later.

The independent states into which the vast Hispano-American empire has been split are perhaps the least secure communities

claiming to be civilized. Foreign war and civil war are not so much occasional calamities as ordinary conditions of society. Armed banditti, defying rather than eluding the public force infest the roads and sometimes plunder the seats of government.

In Peru (says Dr. Ichudi) in time of war a corps is raised called Monteneros, consisting chiefly of highway robbers and persons who for various offences have forfeited their freedom or their lives. A universal panic pervades the city of Lima whenever a detachment of Monteneros enters the gates. On every side are heard cries of "*Cierra puertas*" (close the doors), "Los Monteneros." Every person passing along the streets runs into the first house he comes to and closes the door after him. In a few moments the streets are cleared and no sound is heard but the galloping of the Monteneros's horses.⁵³

I have described Brazil as advancing more slowly than Canada and Canada more slowly than the United States. But in Spanish America the comparison is not between more or less rapid advance but between more or less rapid degradation. Half-ruined towns, deserted villages, vast churches, apparently planted in solitary forests—all that are supposed to be the signs of an old worn-out civilization—give a melancholy appearance of decrepitude to these recently settled regions. The farm buildings of the great *haciendas* are in ruins. The proprietor of a palace takes refuge in the least dilapidated corner of it. Some mines are abandoned because they are filled with water, others because the roads which communicate with them have been allowed to become impassable.

Captain Mackinnon, who ascended the Parana in 1846 visited a Mr. Davidson, the owner of an estate of sixty square miles on its banks. He found Mr. Davidson preparing to abandon it, and to fly from the country with whatever movable property he could collect. And yet the means of acquiring wealth seemed unlimited, Captain Mackinnon reports a part of his conversation with his host.

"Ah," said Mr. Davidson with a sigh, "if there was only peace and quietness in this land for one single year, what a fortune I could make!"

"How so?" asked I.

"Well, sir," said he, "I will explain it. Mares are of little or no value; at least I could easily purchase 50,000 for a shilling a piece within fifty miles of this spot. Two hundred a day might be killed at my establishment here, their hides cured, and tallow extracted. The hides would fetch at least twelve shillings a piece; and each animal would produce at least twenty-five pounds of tallow; the price of which would amount,

in addition to the hides, to the sum of £61,250, minus 50,000 shillings (£2,500) as the allowance to the dealers. But I believe the value of the hides, and the quantity of tallow are much underrated. What money is to be made here to be sure!"⁵⁴

At this estimate the amount of the gross produce would be £61,250. Deducting from this £20,000 for purchase money, commission, and expenses, there remains a net profit of more than £40,000, or more than 200 per cent. And from profits like these Mr. Davidson was flying in the hope of obtaining in England from £4 to £10 per cent.

An estate of nine miles square (Captain Mackinnon⁵⁵ goes on to tell us) inclosed on three sides by branches of rivers or creeks, most fertile, and partially wooded, was on sale for a sum, in ready money, that would amount to about £250 sterling. A thousand head of cattle might be had at 10 s. a head and 500 horses and mares, at about 5 s. the average, as mares when purchased alone would be much cheaper. Adding these sums together, the whole outlay to purchase and stock this princely property, to commerce with, would be:

land	£250
cattle	500
horses, mares, etc.	125
total	<u>£875</u>

These herds would increase at the rate of 50 per cent the first year, and so on in progression. If, therefore, the holder was prudent for the first few years, there would hardly be any limit to the extent of his stock. One-fourth of the increase might be killed with advantage to the breed, and the hide, and tallow, and beef, return a handsome income. It is hardly possible to look forward to the ultimate fortune of a steady economical man with a capital of about £5,000 who had sufficient fortitude and forbearance not to force his profits too soon. This is a splendid profit for a capitalist, should the political horizon of South America, clear up and security for life and property prevail; a state of things, however, of which I can see no immediate prospect.*¹¹⁶

4. Efficiency of Capital Devoted to Popular Education. Next to security, education is the great promoter of wealth, and perhaps there are few modes by which it promotes wealth so powerfully as by promoting internal security. The only instrument wielded by the law is fear. It represses violence and fraud by the threat of punishment, but does not even attempt to diminish the rapacity and ferocity which occasion them. This is the duty of education.

Each of these great agents requires the assistance of the other. However excellent the instruction, however wide its diffusion, still in every large society there are some whose conduct it does not affect. Their intellects are not strong enough to understand it, or the violence of their passions prevents their heeding it, or they have not sufficient self-control to obey it. Such persons must be restrained by fear, and where fear is insufficient by force. On the other hand, no employment of fear or of force can prevent the prevalence of outrage and robbery in an uneducated community. Nowhere are these instruments more powerful, nowhere is their use more unscrupulous than in slave countries. And nowhere is there less security of person or of property.

In the first place, punishment is a comparatively remote evil, and depends on detection; but neither distant nor contingent motives much affect an uneducated man. To obey or even to appreciate them requires much cultivation. In the second place, no law can be vigorously executed unless the mass of the people assist in its execution; [but] they never will assist in repressing crime, unless they are sufficiently educated to perceive its mischief. This is the explanation of the insecurity of Ireland. The legal instruments for the suppression of outrage and robbery are more powerful in Ireland than in England. The law is more stringent, there is a much larger army and a much stronger police. But the instructors of the people are not on the side of the law. By depriving the Roman Catholic clergy of their endowment, that is to say, of the national capital formerly set apart for their support, and by refusing to substitute for it any other public provision, we have rendered them hostile to the Imperial Government.

To have simply rejected the assistance of the moral force, which in every other civilized country is the best support of the physical force, would have been madness. We have not merely thrown away its aid—we have turned it into a fierce and active enemy.

In almost every parish in Ireland the Catholic priest, in almost every diocese the Catholic bishop, reviles the law as an engine contrived and supported for the purpose of giving the wealth of Ireland to the Protestant landlord and to the Protestant rector. The magistrate is denounced as an oppressor and all who invoke his authority, as prosecutors or plaintiffs, and all who assist it, as agents or even witnesses, are proclaimed enemies of their country. Men are attacked on public thoroughfares and in open day, and

the bystanders refuse to interfere, or, if they do interfere, interfere only to protect the murderer. The perpetrators of an outrage are known to hundreds, all could give information—many positive evidence—but the surviving family of the sufferer is afraid to prosecute. The witnesses fly lest they should be wanted, and, if they are forced into court, forget all that they have seen or heard. The Protestant jurymen are afraid, the Catholics do not wish to convict. Hence the insecurity of Ireland—an insecurity which necessarily checks the formation and the introduction of capital, and keeps poorer than Poland or Turkey a country which nature enabled to be richer than England.

A national capital of about ten millions employed in educating, maintaining, and conciliating the Roman Catholic clergy, would do more to give Ireland wealth, than hundreds of millions advanced by the state for the construction of railroads or the drainage of bogs. Supported by the priests the law will regain its power and, as soon as person and property are safe, Ireland will make her own railroads and reclaim her own wastes. But while the law is paralyzed by the enmity of the clergy, railroads will scarcely pay their expenses, and the new land given to agriculture will only produce new swarms of half-starved and half-barbarous cottiers.

The promotion of security is, as I have already said, the principal means by which education promotes the increase of wealth; but it gives other and very important assistance both by its intellectual and by its moral effects.* ¹¹⁷

It is scarcely necessary to do more than allude to the influence on wealth of intellectual cultivation. During the last one hundred years the wealth of England has more than quadrupled. We are not more diligent, or more frugal than our grandfathers—perhaps we are rather less so. We have not enjoyed peculiar security. At no period of our history have we had foreign wars so long, so destructive, or so dangerous. We have had two great civil wars, one of which ended in the dismemberment of our American empire. And yet such has been our increase in wealth that though our population has more than doubled and, therefore, might be supposed to be less favorably situated with respect to one great productive instrument, the land, there is scarcely a family that could bear to be fed, or clothed, or lodged as its great-grandfather was in 1764.⁵⁶ By far the greater part of this marvelous increase of wealth is owing to a still more marvelous increase of knowledge. Our advance in mastering the powers of nature has been greater during the last

100 years, than it was during the 1,000 years that preceded them. And we appear to advance in an accelerated ratio.

The railroad, the electric telegraph, and the use of chloroform—the three most remarkable inventions of this period—have been made during the [first half of the nineteenth] century. What will be the wealth of England 1,000 years hence if every half-century produces equal discoveries!

The effects on wealth of moral cultivation are less obvious, nor can we expect from it such rapid improvement. The principles of physical science have been worked out by man; those of morals⁵⁷ are revealed by God, and were as well known therefore to the Apostles as they are now or as they will be 1,000 years hence. It is not therefore to the improvement *in kind* of morality, but to its greater diffusion that we are to look for an increase of wealth.

The qualities which favor the accumulation of capital are perhaps more dependent on education and example than any other moral excellencies. A savage may be brave and affectionate; he may be ready to sacrifice his ease, his health, or his life for the advantage of his tribe or of his chief. He may have many virtues in a degree unusual in the bulk of the inhabitants of a civilized country. But he cannot accumulate. He cannot labor for distant results. Even in civilized societies few persons can do this voluntarily. The labor which is so directed is almost always purchased or forced. Among savages, where the relation of employer and workman does not exist, nothing is undertaken which does not promise an instant or at least a very early reward.

The savage is equally unfit for the other means of accumulation, abstinence⁵⁸ from immediate gratification. *The craving for excitement and for admiration—the two great provocatives of expenditure—are generally strong; the clear perception of the value of a future good, and the desire to provide for the future happiness of our descendants—the two great motives to abstinence—are generally weak, in proportion to the absence of education.* Without doubt when the custom of saving is prevalent, men of uncultivated minds will save from mere imitation;⁵⁹ but such instances are rare. As a general rule, it may be laid down that *in proportion to the diffusion in a community of habits of reflection and self-control—to the wish to provide for the happiness of others, and to the weakness of the solicitations of sense and of vanity—in short, in proportion to its moral improvement will be the force of the principle of accumulation, and consequently, the increase of capital.**¹¹⁸

CHAPTER IV

THE FOUNDATIONS OF MODERN CAPITALISM: INDUSTRY, ABSTINENCE, AND SECURITY

1. The Causes of Capital Formation: Industry and Abstinence. 2. Distinct Types of Abstinence: Frugality and Providence. 3. Indices of the Degree of Providence Existing in a Community. 4. Retardation of Abstinence through War, Autocracy, and Mobocracy.

1. The Causes of Capital Formation: Industry and Abstinence. Having explained the nature of capital, I proceed to consider the causes to which it owes its existence.

To a certain extent it is the gift of nature. She gave to man the globe and all its contents—its minerals, its vegetation, its rivers, its seas, and its brute inhabitants. But scarcely any gift of nature, except the sea, is of much service to man until he has fashioned it to his use; and that fashion, in general, contributes to its utility much more than the mere bounty of nature. The ore out of which an anchor has been made had little value while it was buried in the mine.* ¹¹⁹ Even land derives a great, in many cases the principal, part of its value from the labor that has been expended on it.

All however that nature gives or art improves is not capital, or capital would be synonymous with wealth. [It will be recollected that] the differentia which separates capital from other wealth is, that it is employed productively. To the quality of the human mind which occasions wealth to be so employed I give the name of *abstinence*. By that term I express the conduct of a person who either abstains from the unproductive use of what he can command, or designedly prefers the production of comparatively remote, to that of immediate, results. The existence of capital depends on the operation of industry and abstinence on some material supplied by nature.* ¹²⁰

In what then, it may be said, does the abstinence of a shopkeeper consist? A wine merchant could not drink all his stock of wine, or an ironmonger use all his stock of hardware. His abstinence consists in the use which he makes not of his stock, but of the money for which he sells it. He may use that money for the mere purpose of

present enjoyment. And so far as he does so he exercises no abstinence. But all that he employs in keeping up his stock, all that he pays in rent for his shop and in wages to his shopmen is so employed at a sacrifice of immediate enjoyment, and involves therefore the exercise of abstinence. The same may be said of a capital which is not employed by its proprietor but lent. The abstinence of a man who has £20,000 and instead of consuming it, as he might do, by living for three months as if he had £80,000 a year, lends it and lives on the interest, resembles that of the shopkeeper,—excepting that it is not accompanied by labor. So a landlord, with a landed estate producing him £10,000 a year, who spends his income exercises abstinence so far as he keeps within his income. He exercises still more abstinence if he devotes a portion of that income to the improvement of his property. He ceases to exercise any only when he sells the property and wastes its price.

Every man, in short, exercises abstinence who voluntarily abstains from unproductive expenditure.

It must be admitted however that there is a class of cases in which commodities are used productively without any exertion of abstinence being involved. These are the cases in which their consumption is necessary in order to keep the consumer in the health and strength which are requisite for production. The substantial meal by [means of which] a navigator prepares for his work is productively consumed, but not abstinely. The same may be said of his clothing and of his lodging. This arises from the provision which nature has made against our omitting some of the functions which are essential to health. If the want of food were no more felt than the want of exercise it would as often be neglected, and men would die of deficiency of nourishment as they now die of deficiency of exertion. Nature has made eating pleasing and hunger painful. If she had not done so, if the taking substantial food had been merely an act of trouble and expense, undergone only because it was known by experience to be necessary to strength, the devoting to it time and money which might have been agreeably spent, would have been an act of abstinence. It would have been like going through a course of training. And although the consumption of necessities, though a productive act, is not an act of abstinence, the *providing* beforehand a store of such necessities is. And the longer the time that elapses between making such a provision, and the actual consumption, the greater the abstinence.

I am aware that I employ the word abstinence in a sense more extensive than is warranted by common usage. Attention is usually drawn to abstinence only when it is not united to industry. It is recognized instantly in the conduct of a man who allows a tree or a domestic animal to attain its full growth instead of consuming it when young; but it is less obvious when he plants the sapling or sows the seed corn. The observer's attention is occupied by the labor, and he omits to consider the *additional sacrifice* which must be made when labor is undergone for a distant object. The savage who kills an animal in order to eat it immediately can scarcely be said to exercise any abstinence. He exercises some, but not much, if he salts or dries a portion for future use. This however is an act which exceeds the accumulating powers of the lowest savages. It is found only among those of a somewhat improved cultivation. To spare a male and female in order to breed from them and feed on their progeny, and to undergo the labor of taking care of them and maintaining them till they have produced a herd or a flock, is a degree of abstinence which almost forms the line of demarcation between savage and civilized life.* ¹²¹

2. Distinct Types of Abstinence: Frugality and Providence. [In the last section] I explained that capital owes its existence to the concurrence of two mental qualities, industry and abstinence. And I defined abstinence to be the conduct of a man who either refrains from the immediate enjoyment of a commodity, or who employs his labor, or, what is the same, the labor of others for the production of remote instead of immediate results.* ¹²² Both the refraining from immediate consumption, and the devoting labor to the production of distant results, is a preference of the future to the present—each implies forbearance. I therefore class both under the same genus, abstinence.⁶⁰

To the first, to the refraining from immediate enjoyment, I give the name of *frugality*.⁶¹ To the second, to the devoting labor to distant results, I give the name of *providence*. It may, at first sight, appear that the distinction between frugality and providence is unimportant. They appear to spring from similar motives, to be productive of similar results and to be favored by similar external circumstances. This however is far from being the case.

Frugality and providence are indeed both necessary to the creation of capital, and both imply forbearance; but there their resemblance ends.* ¹²³ [These species of abstinence] differ materially from one another, and are respectively more frequent in different

states of civilization, and among different classes of society and among individuals in the same society.* ¹²⁴

Providence, the devoting to distant objects labor, or what is the same thing, the command of labor, requires *imagination* by which the merits of untried sources of happiness are conceived; *judgment* which estimates the time that will pass before they are likely to be obtained, and the means of success and the chances of failure; and *perseverance*, long in proportion to the interval between the commencement and the completion of the undertaking. Often the benefit is too remote to be fully enjoyed, or indeed to be enjoyed at all during the life of the author of the original expenditure. The chestnuts of Hampton Court, now in their full beauty, were planted by William III. At his death they must have been mere saplings. The Duke of Bridgewater, in order to make the Canal to which Manchester and Liverpool owe much of their prosperity, and his own descendants their enormous wealth, passed a long life of privation, almost of poverty. Such sacrifices require not only a preference of the future to the present, but of others ⁶² to one's-self; [and, as will be developed hereafter,] they require also *security*.* ¹²⁵

[Frugality, on the other hand, is compatible with a lower type of mind.] An Irishman is *frugal*. If he foresees that his potato pit will scarcely last till the next crop, he can put himself on short allowance for months. When he is working at the English harvest, with the means of large immediate enjoyment in his power, and surrounded by those who are indulging in them profusely, he can live scantily and coarsely, save almost all his wages, and at last place his whole fund in a bank for remittance and beg his way home as he can. During the famine of 1846 there were found every morning on the roads towards the seaports attenuated corpses of men and women who had died under the hedges during the night. Most of them had money about them, often sums of £10 and more. They had been persons intending to emigrate who, rather than touch the little store which was to pay their passage money and start them in America, had abstained from food until their strength failed, and they lay down to sleep and never woke.

But to this excess of frugality ⁶³ is often joined a deficiency of providence. It is with great difficulty that the Irish can be induced to make an exertion or an expenditure unless the reward be immediate. The cottier never weeds his field or even his garden. "Sure," he says, "the weeds would come again." So he plants his

potatoes in what are significantly called "lazy beds" and leaves them untouched till they are fit to dig. He scratches his field only six inches deep. With his wooden plow and his miserable horse he can do no more. If he were to take a spade and trench it eighteen inches or even a foot, he would turn up a virgin and more productive subsoil: but nine months would pass before it became productive; and he will not labor in the expectation of so distant a return. Not two-thirds of the land which might be profitably reclaimed is cultivated. The remaining third requires draining and the removal of the stones which are scattered over it. A couple of years perhaps would be required for these operations. Neither the landlord nor the tenant likes to expend money or labor on so remote a futurity. And thus the country which is the most over-peopled in the whole world—the country in Europe in which the agricultural population bears the greatest proportion to the extent of the land—is the country in which the smallest proportion of the cultivable land is made use of, and in which the least amount of labor is employed on the cultivated portion. It may be supposed that this arises from laziness; but the Irishman is not lazy when a immediate reward is held out to him. The Irish when in England are among the most hardworking laborers. They have monopolized some of the most laborious trades.

The fault of the Englishman, on the other hand, is a deficiency in frugality. The mass of the people are not merely without accumulated property, they are almost all in debt. The village shop gives as long a credit as a London coachmaker. The manufacturing population earn per family average incomes which would support a gentleman in Germany; but when trade is good they waste the whole in costly indulgencies, and when it is bad they are paupers.

English troops always have their supplies of food in their immediate rear. They cannot move, therefore, much more rapidly than their magazines. French troops can start on a march carrying in their knapsacks biscuits and brandy for ten days. They move, therefore, with far greater ease and celerity. The English soldier cannot be trusted, as the Frenchman can, with ten days' provisions—he would consume it all in the first three or four days.

But, with the single exception perhaps of the Dutch, the English are, in my sense of the word, the most provident population in Europe. Every foreigner is struck by the number and variety of their tools. Now the making or purchase of a tool is necessarily an exercise of providence. It is an expenditure of labor or money for

the purpose of production, not of immediate enjoyment. There is no country in the world in which life insurance is so common—and life insurance is an expenditure for a purpose so remote that the insurer never can see it attained. Fire insurance is still more general. Nine-tenths of the good houses in England are insured. The event provided against is not only distant, but highly improbable. Not one house in 500 is burnt. And as the duty is nearly double the annual payment, and the annual payment by itself is sufficient not only to cover the risk and pay the expenses of the insurance office, and also afford a profit, it follows that at least three times as much is paid to purchase security from fire as that security is worth.

Over-farming, over-building, over-trading, or over-manufacturing, that is to say, the providing instruments or commodities so elaborate or so numerous as not to be worth the cost of producing them, are the errors against which every young producer is cautioned. Even the legislature thinks it necessary to interfere and to require those who wish to employ their own money in providing the public with a railroad to show that there is a reasonable prospect of a remunerative traffic within a reasonable time. In all her foreign trade England is a creditor; she gives a long credit when she sells, and when she is to purchase often advances a part of the price not only before the commodity is received but even before it exists. A great part of the production of less provident nations is effected by means of British capital. While the Irishman's hopes and plans always relate to something that is near, the Englishman's seem always to fix on something that is distant.* 126

3. Indices of the Degree of Providence Existing in a Community. One of the best indications of the degree in which a nation is provident is the degree of durability which it gives to its commodities and instruments. An instrument or commodity which will last fifty-five years, when compared with one which will last only thirty, may be said to be an instrument of thirty-years duration, capable at the end of that period of producing another lasting twenty-five years. As increased durability can scarcely ever be given except by increased labor, the purchase or making of the more durable commodity is an exertion of providence. The purchaser buys the latter twenty-five years of his commodity by advancing for thirty years the price of the first of those twenty-five years, and by advancing for fifty-four years the price of the last of them.

Another indication is afforded by the care with which commodities or instruments are preserved or kept in order. Taking care of things implies constant providence in preserving them from injury and repairing them when injured. Every house in Holland looks as if it had just been finished. You look up and perhaps see its date in the 16th century. Perhaps during the three centuries that have passed since the best room was built it has been used by each successive family only half a dozen times—for a marriage, a christening, or a funeral. Give a family of Connaught cottiers the house and even add to it the income which enabled the Dutch to keep it up, and it will suffer more in ten years than it did in the previous two centuries. The roof will get out of order and be allowed to remain so, windows will be broken and partially stuffed with rags, and what was intended to admit light and exclude rain will let in rain and keep out light. The external woodwork and iron will perish for want of paint; a dunghill will be put before the door, because it costs trouble to remove the offal of the family to a distance: and what seemed the abode of neatness—carried perhaps to an uncomfortable excess—will become soon merely a larger cabin, and perhaps at no distant time cease to be habitable.

Another indication may be drawn from the nature of the materials which are allowed to remain unused. Where we see mountains terraced into vineyards or corn growing on what was the bottom of the open sea, we know at once that we are among a provident people. Where in a dense population land fertile, or capable of fertility lies unreclaimed, we may infer that that population is improvident.

Upon the banks of the St. Lawrence (says Mr. [John] Rae) there are several little Indian villages. They are surrounded, in general, by a good deal of land from which the wood seems to have been long extirpated, and have, besides, attached to them, extensive tracts of forest. The cleared land is rarely, I may almost say never, cultivated, nor are any inroads made in the forest for such a purpose. The soil is, nevertheless fertile, and were it not, manure lies in heaps by their houses. Were every family to inclose half an acre of ground, till it, and plant in it potatoes and maize, it would yield a sufficiency to support them one half the year. They suffer too, every now and then, extreme want, insomuch that, joined to occasional intemperance, it is rapidly reducing their numbers. This, to us, so strange apathy proceeds not, in any great degree, from repugnance to labor; on the contrary they apply very diligently to it, where its reward is immediate. Thus, besides their peculiar occupations of hunting and fishing, in which they are ever ready to en-

gage, they are much employed in the navigation of the St. Lawrence, and may be seen laboring at the oar, or with the pole, in the large boats used for that purpose, and always furnish the greater part of the additional hands necessary to conduct rafts through some of the rapids. Nor is the obstacle aversion to agricultural labor. This is no doubt a prejudice of theirs; but mere prejudices always yield, principles of action cannot be created. Where the returns from agricultural labor are speedy, and great, they are also agriculturists. Thus, some of the little islands on lake St. Francis, near the Indian village of St. Regis, are favorable to the growth of maize, a plant, yielding a return of a hundred fold, and forming, even when half ripe, a pleasant and substantial repast. Patches of the best land on these islands are, therefore, every year, cultivated by them for this purpose. As their situation renders them inaccessible to cattle, no fence is required; were this additional outlay necessary, I suspect they would be neglected, like the commons adjoining their villages. These had apparently, at one time, been under crop. The cattle of the neighboring settlers, would now, however, destroy any crop not securely fenced, and this additional necessary outlay, consequently bars their culture. It removes them to an order of instruments, of slower return, than that which corresponds to the strength of the effective desire of accumulation, in this little society.

It is here deserving of notice, that what instruments of this sort they do form, are completely formed. The small spots of corn which they cultivate are thoroughly weeded, and hoed. A little neglect in this part would, indeed, reduce the crop very much; and this experience has made them perfectly aware, and they act accordingly. It is evidently not the necessary labor, that is the obstacle to much more extenuated culture, but the distant return from that labor. I am assured indeed that among some of the more remote tribes, the labor thus expended, much exceeds that given by the whites. The same portions of ground being cropped without remission, and manure not being used, they would scarce yield any return, were not the soil most carefully broken, and pulverized, both with the hoe and the hand. In such a situation, a white man would clear a fresh piece of ground. It would perhaps scarce repay his labor the first year, and he would have to look for his reward in succeeding years. On the Indian again succeeding years are too distant to make sufficient impression, though, to obtain what labor may bring about in the course of a few months, he toils even more assiduously than the white man. The wages of labor with him, are lower than with the white man, for his wants are fewer. But for this, the range of materials, coming within reach of his effective desire of accumulation, would be even more limited than it is, and the amount of instruments formed by him, less.⁶⁴

The best test, however, of the force of providence is afforded by the price paid for the hire of any durable commodity or instrument. To lend is obviously an act of providence, since the lender might use the thing for himself or sell it and employ the price in purchasing immediate pleasure. The weaker the average providence in a people the larger must be the reward that will tempt them to exert it.

Of course I do not mean to say that the average number of years purchase of land, or the average interest of money is solely governed by the average providence of a country. Political circumstances may give to land an undue value. Such is the case in France, where the long revolution—now apparently as active as ever—has from time to time destroyed every other kind of property and made land the only safe investment. So a borrower insatiable in his desires and careless of the price which he pays may raise unnaturally the interest of money—as was done by the British Chancellors of the Exchequer during the [Napoleonic] war.⁶⁵ It is true also that the price of land and the interest of money may be affected by the general productiveness of capital, and that the number of years purchase of land will be few and the interest of money will be high in countries in which the abundance of good and unappropriated materials renders instruments unusually effective. Such is the case in North America and in New Holland. But subject to these disturbing causes, which in general can be ascertained and allowed for, in a provident community the number of instruments will be large and the price paid for their use will bear a small proportion to their value, and in an improvident community they will be scarce and dear.

In fact it is, in general, the average price paid for the purchase or for the hire of durable instruments, and, in particular, the average number of years purchase of land, and the average interest of money, which decides, in every particular society, the extent to which a member of that society will carry his providence, or, in other words, what degree of future advantage will induce him to sacrifice for a given time a given amount of the means of present enjoyment.

By *the number of years purchase of land* I mean a multiplier of the average net rent for which a given estate will let to a solvent tenant, deducting all the expense to which the owner may be put in repairs or collection. By *the interest of money* I mean the net sum paid for the use of a given sum of money lent on perfect security and capable of being called in at will.

If we suppose now the interest of money in any country to be ten

per cent per annum, and land to sell for ten years' purchase, it would not be advantageous to incur present expenditure for a future object unless the *profit*, that is to say, the value of the return above the value of the expenditure, were at the rate of ten per cent for every year of delay. Since if it were less, more would be got by lending the money, or by purchasing land. The visitor of a flourishing colony, where the skill and industry of an old community is employed in working up the abundant materials of an unoccupied territory, is struck by the slightness and roughness of the instruments employed, and by the quantity of useful materials wasted or neglected.⁶⁶ But where land is abundant, if two men can raise from 100 acres of land twenty bushels of corn per acre, it would not be worth while to employ four in order to raise thirty. It would be worth while in England, because the two additional men could not be more profitably occupied. In South Australia, instead of being employed in raising the produce of the first 100 acres from twenty bushels per acre to thirty, they would raise twenty bushels per acre from new land. So if at the expense of £1,000, advanced for two years, a swamp could be converted into a field which would let for £75 a year, such a transaction would be advantageous in England where the average interest of money is under four per cent per annum, since it would give a profit of above seven per cent. It would be disadvantageous in South Australia, where money is worth ten per cent per annum.

Those whose providence is less than the average providence of the society in which they live, if they are born poor remain poor. The average remuneration of abstinence appears to them inadequate. Sir George Lewis, in his report on the Irish settled in England, tells us that none of them accumulate. Those however who emigrate to America, where capital is more productive, often become capitalists. In that country indeed they have a double advantage. They find there habits of expenditure much greater than those in which they have been bred, and more profitable means of employing their savings. Their habits of frugality are formed. All that they want is providence, and that is given to them by the high rate at which it is remunerated.

Those on the other hand, who are born rich, if deficient in ordinary providence do not remain rich. They can part with the instruments from which their incomes are derived for sums which, according to their estimate of the present compared to the future, are above their value. A man with an estate of £1,000 a year lives among people

who are spending £2000. He imitates them, and becomes £1,000 in debt. By reducing his expenditure to £900 a year for ten years he could pay this off. But he can borrow £1,000 at four per cent, and then his income will be reduced by only £40 a year. The prospect of £1000 ten years hence is not a motive sufficiently strong to induce him either to pay his debts out of his income, or to save, out of that income a sinking fund to pay off the mortgage. He borrows first to pay debts, afterwards to pay interest, and while he can continue to borrow he feels rich. In time the estate ceases to be a sufficient security, the mortgagee sells it, pays himself off, and gives the owner the surplus. That surplus, of course, is wasted much sooner than the property of which it is a remnant; and thus the whole passage from wealth to poverty occupies only a few years.

Those whose providence exceeds that of the society in which they live become rich. They become the purchasers of the productive instruments which the improvident sell. They work up materials affording a return rather more distant or a profit rather smaller than those generally used, and of those instruments they can choose the most certain. With every fall of the ordinary rate of interest the sphere of providence is extended. As long as the interest of money is five per cent undertakings likely to produce only four and a half per cent, however convenient or useful to the public, are not engaged in by individuals of only average providence. Let interest sink to four per cent and they are eagerly sought for, and those which have been preoccupied by men of more than ordinary providence now afford a more than ordinary profit.* ¹²⁷

4. Retardation of Abstinence through War, Autocracy, and Mobocracy. Of the two qualities which I have been discussing, providence and frugality, providence seems to require the higher national and individual cultivation. When a man refrains from the use of a commodity to-day, retaining full power to use it to-morrow, he knows that his reward is certain and near. He knows that he shall wake the next morning a richer man by the amount of his forbearance. And he knows that he need not share this future enjoyment with any one else. Hoarding therefore, which is simple frugality, is common in every state of society and with every degree of education. Providence, on the other hand, cannot prevail extensively except under peculiar conditions, both political and personal.* ¹²⁸

[In section 2 of the present chapter I stated that providence presupposes the existence of the higher intellectual and moral qualities, such as imagination, judgment and perseverance; and I

added that it requires] also *security*⁶⁷ [a] security against private violence or fraud, [b] security against foreign invaders, and what is far more rare, [c] security against the rapacity of the government. The first of these does not require a very advanced state of civilization, but the two latter are modern inventions. The normal state of mankind from the times of Nimrod down to those of Bonaparte seems to have been war, interspersed with intervals of peace, and gradually softening under the influence of Christianity and philosophy, but avowedly and systematically destructive on land until the end of the reign of Louis XIV, and at sea at the present instant.* ¹²⁹

The laws of war, as they have prevailed in Europe, on land, during the last two centuries, have made comparatively unimportant the dangers to property from foreign invasion. The suburbs of a fortress may be destroyed by the besiegers or by the garrison, contributions are sometimes exacted, and from time to time a town is bombarded or sacked. But these are rare accidents. From the termination of the Thirty Years' War, in 1630, down to the wars which have lately disturbed Italy, Denmark, and Hungary, the only case of wanton, wholesale ravage was the wasting of the Palatinate by Louis XIV. And the execration which immediately followed that crime showed the improvement that had taken place in the rules according to which nations profess to act, the aggregate of which forms what is called *the law of nations*; for the conduct which in 1689 raised the indignation of Europe had been the usual practice of invaders from the earliest periods until the end of the sixteenth century. The treatment of the inhabitants of Canaan by the Israelites, the first successful invasion of which we have a record, is a mere sample of the conduct which conquerors for thousands of years afterwards thought lawful against the conquered.

Gradually indeed, as the increase of capital increased the productive powers of labor it was found profitable, instead of indiscriminately slaughtering them, to keep the women and children and some of the men as slaves, and those only whose services were not wanted were put to death. The increase of commerce afterwards afforded a market for the sale of superfluous prisoners, their destruction became an exception, and seldom took place unless, as in the case of the Platoans, the avarice of the captors was overcome by strong national animosity. When Europe became Christian, and the practice of retaining Christians in pure slavery gradually wore out, our Gothic ancestors substituted for it serfdom. They retained

the conquered people on the land and forced them to cultivate it for the benefit of the conquerors.

Of course, when such were the laws of war as respects persons, the property of the enemy was not spared. It was treated on land as we now treat it at sea—confiscated when it could be used, or carried away; destroyed when it could not be appropriated.

While war was the normal state of society—and (with the exception of Italy from about the times of Cæsar to those of Constantine and of the British Islands during the last 800 years) such has been the state of Europe from immemorial antiquity until near the close of the seventeenth century—and while such were the laws of war, an investment of a considerable capital in an undertaking yielding a distant return, might be an act of abstinence, but was scarcely an act of prudence. Almost all the great and durable works of those times were either intended for defense, where durability was necessary to efficiency or were edifices of a sacred character such as tombs or temples, which an enemy was likely to respect. Aqueducts, baths, theaters, roads, and other erections of permanent utility belong to the peaceful period of the Roman supremacy. The Greeks and Egyptians raised only temples, monuments, and fortresses; our medieval ancestors only cathedrals, castles, and convents.* ¹³⁰

Arbitrary taxation, in despotisms to supply the wants of the ruler, in aristocracies and in oligarchies to supply those of the state, is perhaps still more destructive to providence than even war. The presence of the foreign enemy is occasional and local, that of the tax-gatherer is universal and perpetual. The one can be resisted, the other can be only eluded—and he is to be eluded only by the appearance of poverty. This is of course inconsistent with the devotion of labor to distant results. A canal or a plantation cannot be concealed.

On the other hand, the reward of mere frugality is certain and immediate—the man who saves a shilling to-day is certain to be a shilling richer to-morrow. He need not lay any long plans depending on the future probabilities, or on the conduct of those with whom he has now to do or may have to do hereafter. He need not share his economies with others, it is always in his power to consume them himself. In an insecure country he selects as the subjects of his frugality things which can be easily concealed, and that frugality itself, and the appearance of poverty, which it induces are a protection against the spoiler whether he be foreign or domestic. The consequence is that the insecurity which is de-

structive of providence is an incentive to frugality. Our pleasures depend so much on sympathy⁶⁸ that few men receive much gratification from the solitary enjoyment of wealth. To live, as some rich Jews are said to have lived during the dark ages, and as some rich Turks live now, in a dwelling contrived to look like a ruin without, while it is a palace within; to wear silks under rags, to feed sumptuously but with locked doors, is a mockery of wealth of which few would think the pleasure worth the risk.

In England⁶⁹ men in whom the principle of abstinence is strong, dig canals, build towns, construct railways and docks, plant woods, drain marshes; and, without perhaps an atom of public spirit, pass all their lives and expend all their incomes in benefiting the public. In Asia they accumulate gold, silver, and precious stones and bury their treasures in the earth.*¹³¹ In such countries, therefore, the only creator of works of slow formation and durable utility or magnificence is the sovereign. The pyramids and temples of Egypt, the Parthenon of Athens, the Colosseum and Palatium of Rome, the palaces of Genoa and Venice were all the works of the ruling power, of the state, sometimes called Pharoah, sometimes Demos, sometimes Princeps, sometimes Doge, and sometimes Senator.*¹³²

This is the explanation of the declamations against the love of riches which amuse us in the writings of the ancient moralists. To an Englishman wealth⁷⁰ is safety. He can purchase with it the avoidance, the removal, or the mitigation of almost every ill to which humanity is exposed. To a Greek or to a Roman it was a source of constant danger. He was the subject of perpetual extortion from the sovereign, whether people, senate, or prince. If he invested it in agriculture or in manufactures, he was forced to be the owner and the taskmaster of an army of slaves. If he lent it at interest, as was the usual practice with the great Romans, he could compel payment from his semibarbarous debtors only by cruelties which it would torture us as much to inflict as to suffer. Hoarding, now the rare folly of a half-mad beggar, was then one of the most usual forms of accumulation. And even in the security of modern times the hoarder is always in danger. Under such circumstances I can well believe that decent poverty was more to be desired than treasures which it was hazardous to possess, to employ, or to expend—treasures which moth and rust corrupted and thieves broke in and stole.

It is a proof of the insecurity of property during the period at

which the English language was formed that a person whose frugality is excessive is called a miser. Of course frugality when in excess, like every other habit which deviates from the mean, diminishes the happiness of the person whom it affects. But if misery is to be predicted of all who do not hit the mean with respect to expenditure, I am sure that those who err on the side of prodigality deserve far more the character of misers than those whose defect is parsimony. The state of the one is getting continually worse, that of the other, continually better. To gloat over the gradual accumulation of wealth which the owner has not the heart to spend is a low, groveling pleasure; but still it is a pleasure, and to the minds which nature has fitted for it, a very great one. But it is absolutely dependent on the feeling of security. The accumulator who must himself keep watch over his treasures, or, to take a much milder form of insecurity, who has to dread their being swept away by the exactions of a government, or their dissolving in the storms of a revolution, finds his wealth perhaps a source of as much anxiety as of comfort. Even this anxiety may be less miserable than the steady depression of the prodigal, who sees the regular approach of the period when the pleasures of sense or of vanity which he values enough to purchase them by ruin, will suddenly cease and temporary wealth will give place to permanent poverty.

But the sufferings of the miser excite no sympathy, perhaps there is a tendency to rejoice in them. It is only by means of a reasoning process of some length and intricacy that we can convince ourselves that the man who, with a capital of £200,000 and an annual income from it of £20,000, lives on £500 a year and adds all his profits to his capital, contributes more to the happiness of mankind than if he spent all his revenue as he received it in splendid expenditure.⁷¹ The man who spends £20,000 a year unproductively spends nearly the whole of it among his friends and his neighbors. The man who saves £20,000 a year spends it among strangers who perhaps never hear his name. He spends it in building or freighting ships, in exporting manufactures, in importing materials, in making railways and piers and harbors. And his expenditure is constantly increasing. His capital of £200,000 becomes £220,000 the first year, £240,000 the second, £260,000 the third and so on, as long as his frugality continues.

The expenditure of the unproductive consumer cannot increase except by the destruction of his capital. But those among whom

or upon whom his money is spent—his tradesmen, his servants, and his guests—repay with their gratitude or their admiration the pleasure or the advantage which they receive. Such rewards are seldom bestowed on frugality. He who employs his money productively is known as a taskmaster and a bargainer. He is constantly fighting against idleness, cupidity, and bad faith, always ready to suspect them, and often forced to punish them. One of the most effective checks to abstinence is its unpopularity.*¹³³

Security against the folly of government, even in the low degree in which such security exists in the best governed countries, is still more recent, and still more imperfect. It cannot indeed be perfect, for the wisest administrators must be subject to error; but we can easily conceive a state of things in which the errors would be fewer and less mischievous than those under which Europe is now suffering. Such an improvement however does not seem to be at hand, at least on the continent of Europe.

Never were public rights and private rights, international law and municipal law, so widely or so shamefully trampled upon; never was there such an even race run between human folly and human wickedness as in the scenes which France, Germany, Rome, Naples, and Frankfort exhibited during [the Revolution of] 1848 to the scorn and terror of mankind.*¹³⁴ And what makes our prospects more formidable is the steady increase in strength of the democratic element; and, concurrent with that increase, and apparently dependent on it, the increased malignity of international hate, and the increased rapacity of national ambition.*¹³⁵ Almost everywhere the people becomes year after year more powerful, and almost everywhere with its power grow its evil passions; while its sense of justice and its respect for property seem to diminish.

Even plunder or confiscation is less fatal to abstinence than what is called socialism⁷² or communism. The first only incidentally diminish the motives to production, the second aims specifically at destroying them. It proposes to enact that industry shall not be rewarded by wages nor abstinence by profit; that those who toil shall toil for others, and those who save shall save for others,—in short, that hope shall cease to govern mankind. If this system should ever be attempted to be adopted—and I do not think that the possibility of the experiment's being made can be denied—it will be necessary to substitute fear, and the socialist

nation, unless it is to starve, must be divided into slaves and slave drivers.

The last species of security, security against the violence or fraud of individuals is by far the most easily attained. The murderer and the robber are the natural enemies of mankind. The whole society, in general, unites in hunting them down; and we often find persons and property safe from private aggression in communities which in other respects are grossly ill governed.

If there be a country in which public sympathy is on the side of the offender, in which the bulk of the people are in a state of chronic conspiracy against the administrators of justice, in which witnesses are frightened into forgetfulness and jurors into acquittal and those who have been injured fly from their country to avoid being forced to prosecute,—if there be such a country ⁷³ its anomalous state is a symptom of some deep-seated social wound. Some grave injury, some contemptuous insult, or some bitter combination of both must have alienated the people from their government, and made crime popular because opposed to law.* ¹³⁶

CHAPTER V

EFFICIENCY OF CAPITALISTIC PRODUCTION: USE OF MACHINERY AND STANDARD- IZATION OF PRODUCTS

1. The Functions of Materials, Commodities, and Instruments when Used as Capital. 2. Classification of Instruments. 3. Comparatively Limited Efficiency of Brute Power. 4. Evolution of Inanimate Instruments. 5. The Qualities of Modern Machinery: Force, Dexterity, Uniformity, and Safety.

1. The Functions of Materials, Commodities, and Instruments when Used as Capital. In a former chapter I remarked that production is the occasioning an alteration of the existing condition of matter or of mind, the occasioning of which or its result is a matter capable of exchange; and that material products may be divided into four classes: 1st, those in which the product is a personal change; 2nd, those in which it is a chemical change; 3rd, those in which it is a mechanical change; 4th, those in which it is a commercial change.

A personal change does not occasion any permanent material result. A speech or a song perishes as it is uttered. Nor does it necessarily require the use of capital. The only instruments and the only materials used by an actor or by an orator may be his mental and body faculties. But every other sort of production requires the use of materials and instruments, [which, as we have seen], results in a commodity, a material, or an instrument.

When a man has possessed himself of an article of wealth and resolves to employ it not for the mere purpose of enjoyment, but as capital, or, in other words, as a means of further production, he may use it either as a material, as a commodity, or as an instrument.⁷⁴

If he uses it as a material, there are three ways in which he may employ it.

First. He may subject it to a chemical change, as when a glass-maker converts soda and silex into glass, or a farmer seed and manure into wheat, or a wine merchant keeps wine in his cellar until it has been improved by the operation of the agents to which we give the collective name of time.

Second. He may subject it to a mechanical change, as when a glassmaker grinds and polishes a piece of rough glass.

Third. He may subject it to a commercial change, by sending it for sale to another market.

If he use it productively as a commodity, he may employ it in four ways.

First. He may keep it exposed for sale to meet the wants of his customers. The finished articles in a shop are thus employed.

Second. He may simply retain it, without offering it for sale, in the hope that its value will be increased by an altered state of the market—as a farmer, for instance, after an abundant harvest keeps his corn in his stacks.

Third. Instead of exposing or keeping it for sale he may lend it. In this case he receives a remuneration which bears a different name according to the thing which is lent. What is paid for the use of immovable capital is called *rent*, for the use of a ship, *freight*, for other movables *hire*, for money *interest* or *discount*. A loan and a sale are often so much mixed in the same transaction that one price is paid for the whole. A man who dines in the coffeeroom of an inn in fact hires the use of the apartment and furniture, and purchases the dinner; but only the dinner is expressly charged to him. In its price is included the hire of the apartment, furniture, and plate.

Fourth. He may employ it in the purchase or hire of some thing to be itself used productively. The part of a farmer's capital which consists of money is thus used. It is paid away in rent to his landlord, wages to his laborers, and in the purchase or hire of the agricultural materials and instruments which he does not himself produce.

When capital is employed as an instrument it is employed in producing an effect on some other material or instrument. For this purpose its value is sometimes intentionally destroyed in order to obtain an effect which is the direct consequence of that destruction. The acids used by a bleacher, the gunpowder with which a mine is blasted, the coals which convert into vapor the water in the boiler of a steam engine are thus used. Each is subjected to a chemical change which destroys its utility, and indeed utterly alters its substance in order to produce an effect on the cloth, the mine, and the water. The food which every producer must consume in order to keep himself in the health and strength necessary to enable him to continue a producer is thus employed.

In other cases the destruction of the utility of an instrument, or,

in other words, its wearing out is not the intended but the incidental consequence of its use. A fiddle or a bridge may last for centuries. A steam engine for fifty years. A ship for twenty. Sooner or later however the utility of every instrument, except perhaps land, is destroyed. Those which appear to be most durable, such as a bridge or a canal, are kept up by the constant replacement of parts. Even arable land is kept intact only by the renewal of its productive ingredients. Land employed as down pasture or as woodland appears however inexhaustible, and, therefore, I have excepted land from the perishableness which I attribute generally to instruments.* ¹³⁷

2. Classification of Instruments. Instruments, implements, machines, and tools (to use words all denoting things of the same genus) may be divided into those which are, and those which are not intended to produce or facilitate motion. Of those which are not intended to produce or to facilitate motion some, like an anchor, a vice, or a nail are intended to prevent motion. Others have no connection with motion, such are most of those which promote chemical changes—a cultivated farm, for instance, with its farm buildings, or the pots, furnaces, coals, and ovens of a glassmaker.

Of those connected with motion some merely remove the impediments to motion, such as roads, bridges, and canals. Others increase its force or rapidity, but derive their impulse from the human hand.* ¹³⁸

The instruments which derive their impulse from man, though far inferior in force to those which create power, are very important. It was the lever, the wheel, the inclined plane, the screw, the pulley and the wedge which raised the Pyramids and carved the Sphinx. Even the simplest of instruments, the spade, enables one man to turn up as much earth as ten men could move with their hands. Without tools man could inhabit only tropical climates, where the sun supplies clothing and the trees food; and in those countries without weapons he would be preyed on by brutes of not half his size.* ¹³⁹

But the most effective of instruments are those which occasion motion independently of human exertion.* ¹⁴⁰ [These] may be subdivided into brute and inanimate. To this genus of instruments the term *power* is often applied. Thus we talk of horse power, water power, and steam power. A loom receiving its motion from man is called a hand loom, one which receives its motion from any other force, a power loom.* ¹⁴¹

[The reader] will, of course, bear in mind that instruments, necessary as they are to production, form only a part of capital. They

are *fixed* capital. The materials on which these instruments are to be employed, the finished commodities which are the result of that employment, and the subsistence of the producer while employed, all which constitute the *circulating* capital of a country, are as essential to production as the fixed capital. A great portion of them indeed is essential not merely to production but to existence. In every state of society, not excepting perhaps even that of a savage under the tropics, life is supported by means of capital, that is to say, by means of funds provided in advance. In the greater part of the world every man stores up these funds for himself. The Irish cottier has his pit full of potatoes; the Swiss has his provision of dried fruit and cheese and wheat; the Hungarian noble has his castle provisioned for six months. In more advanced countries few persons possess a store of the principal articles of consumption for more than a few days; but still in the warehouses of the dealers a stock of subsistence for months is ready for them, though they throw on others the trouble of keeping it till it is wanted. If all the capital of a country could be suddenly destroyed, its inhabitants would perish in a week.* ¹⁴²

3. Comparatively Limited Efficiency of Brute Power. The use of brute power seems to have been coeval with the earliest civilization, and has received little subsequent improvement. The elephant, the camel, the horse, the ass, the ox, and the dog were the servants of men when we first find them collected in the ancient cities of tropical Asia. The reindeer and the dog obeyed him in the north of Europe, the llama and the vicuña in [South] America. The thousands of years that have since passed have added nothing to the number of animals which supply us with brute power, and it is more probable that it will diminish than increase. The falcon, a favorite slave of man for centuries—the companion and almost the friend of princess and knights—has already been discarded from his service. She is now one of his enemies and will probably be expelled from the cultivated parts of Europe. As the elephant does not breed in captivity it must in time disappear, or become too scarce for extensive use; and it is not likely that any animal now wild is fit to be domesticated.

The only mechanical production to which brute power has been extensively applied is plowing, and so valuable was the invention of the plow that it was rewarded by divine honors. But for commercial production, that is to say, for effecting changes of place, brute power has at all times been of great importance. Compared

however with inanimate power it is slow and expensive. A horse, the principal brute power of temperate climates, eats as much as several men, and the time for which he is serviceable compared to that for which he is useless is much shorter. A boy can generally support himself by the time he is ten years old, and he is seldom past work before sixty-five. A horse can seldom be used much before he is four or after he is sixteen. About two-thirteenths, therefore, of a man's life is unserviceable and about one-fourth of a horse.

The great obstacle to the employment of animal power is the expense of maintaining it while at rest. In countries, indeed, in which land is abundant and raw produce almost valueless this objection is not felt. In Buenos Aires a beggar sits on horseback at his begging place, and a petty proprietor counts his stock by hundreds. But in densely peopled countries a horse cannot be profitably kept unless his proprietor can keep him constantly at work for himself or let him out to others. This is one of the objections in England to small farms. Except at certain seasons, a farm of fifteen acres does not afford work for a horse, and at those seasons a horse cannot be hired. The farmer, therefore, must either do without one or keep one during the whole year in order to use him for a few months. Where cows are used for the plow and for draft, as is the case in most parts of Germany, this difficulty is avoided, for a cow is useful while unemployed. The farms therefore in Germany may be, and in fact are, much smaller than in England.* ¹⁴³

In a great part of the Continent the useful instrument which we call a fence is almost unknown. On each side of the road you see children shivering in the cold whose only business is to keep a few sheep or cows from straying—a duty performed with us by a hedge. In other places, especially where the farms are small, men and often women are to be found undergoing the tasks which we impose on horses. I have often seen a whole family—father, mother, sons, and daughters—harnessed to a cart and dragging the produce of their little farm to the market place of Innsbruck; and everywhere in the Tyrol and in Bohemia the traveler meets women carrying up the hillside on their heads baskets of manure which an Englishwoman would not like to stand under.

The average amount of fatigue which a human being can undergo is narrowly limited and can rarely and but for very short periods be exceeded. If he be worked too hard he sickens, and dies from being overworked more readily and, in the countries where the

power most used is human power, more commonly than any other animal. In a campaign for one who dies by the sword ten die of fatigue and of the diseases which fatigue generates. In our West Indian colonies, while the population could be recruited by the slave trade, the deaths exceeded the births. The slaves perished from an amount of overwork which Englishmen, in the 18th century, a humane people and in a humane age, inflicted on them. But in those colonies little use was made of any except human power. The plow was unknown and carts were employed only when the burden to be transported was not supportable by the human neck or the human shoulder.

But the substitution of brute power for human power is often only the substitution of brute suffering for human suffering. A horse, though not so readily overtaken as a man, is yet, easily fatigued, especially if he be required to unite velocity to force. He must then be urged on by the constant infliction of punishment—a process painful to the spectator and brutalizing to the inflictor. Inanimate agents are insensible. A steam engine may be spoilt by being over-driven, but there the mischief ends.*¹⁴⁴

4. Evolution of Inanimate Instruments. Until comparatively modern times little use has been made of inanimate power except for locomotion. The first seats of mankind were on the banks of the rivers; and, from a period long before the records of history, men must have used the current to enable their boats to descend the river, and the wind to assist them in ascending it. But until long after the Christian era we find few traces of their employing the force of water or of wind for any other purpose. Neither the early dwellers by the Tigris, the Euphrates, or the Nile—the first civilized nations whom we can discern—nor even the Greeks till long after the time of Alexander, appear to have used the instrument to which, in its simplest form, we give the name of a mill; in which a wheel, impelled by wind or water or steam communicates motion to the subsidiary organs which come into contact with the material that is to be modified. The most powerful instruments of antiquity—the catapulta, the ballista, and the ram—and even the engines by which Archimedes could seize a Roman galley and suspend it over the sea, were mere applications of simple mechanical forces, deriving their primary impulse from the human hand.

The first use of inanimate power for mechanical purposes seems to have been the grinding corn by windmills and by watermills.

And it is not easy to exaggerate the importance of the invention. I am inclined to think that until watermills were introduced not less than one-twentieth of the adult population of corn-eating countries was thus employed. Out of the 50 slaves who composed the household of Ulysses twelve were constantly at work on the handmill. The whole number of millers and millwrights in Great Britain probably does not amount to 10,000. Instead of one in twenty not one in 20,000 is so occupied. I was at Dresden in 1842 which was a summer of great drought. Many of the mills were stopped for want of water and it produced among the poorer classes almost a disuse of bread. Rather than undergo the labor of grinding or pounding their corn by hand they gave up the use of it.

Many centuries after the invention of mills—for in the middle ages the growth of invention was slow—gunpowder was invented. On the use of this power depend the greater part of our mining operations, and the means of opening communications through rocks. Its great use however has been as the protector of civilization against barbarism and of wealth against poverty. It has armed man with weapons far more destructive than those which derive their force from his hand but also far more expensive. Adopting the well-known division of the subjects of military expenditure into the *matériel* and the *personnel*, it will be found that the *matériel* bears a constantly increasing proportion to the *personnel*.

And yet the armament of our armies is still much less expensive than it ought to be and probably soon will be. Rifles will in time be substituted for muskets; at a great expense in powder and ball every private will be made a good shot; more and more field artillery will accompany every division. In naval war steam power, the most expensive of all inanimate powers, will be substituted for wind power, the cheapest. The weight of marine artillery will be doubled or quadrupled or perhaps decupled. A ball or shell of 200-pounds weight can be thrown farther and with more precision than one of 20 or 30. Explosive balls of great superficies will be used, one of which will be capable of tearing to pieces a large vessel. The art of attack⁷⁵ will, at sea, gain upon the art of defense, and a fleet which has cost the labor of years will be destroyed in an hour. On the other hand, on land, the art of defense will probably continue to gain on that of attack. To erect a single fortress of the first rank will require more labor than would have fortified a long frontier 200 years ago. But such a fortress well provisioned will be practically impregnable. Under

such circumstances war will become so expensive a game that princes, and even nations, who are far more pugnacious than princes, will endeavor to avoid it. And if they do so endeavor it will not take place.

The real triumph however of inanimate power began with steam. Watt first made it manageable. Arkwright showed the minuteness of the purposes to which it could be applied. Until Fulton's time the steam engine was rooted in the soil. He first set it afloat. Stephenson made it movable on land. No bounds can be set to its future destinies. It is as powerful as gunpowder, depending like gunpowder on the irresistible power of expansion.* ¹⁴⁵

What distinguishes it from all other power is its manageableness. Wind power must be taken as it is given by nature. It can neither be moderated nor augmented. Water power is rather more under control, but it is local. Gunpowder can do nothing but destroy. Steam can be used in any place to which water and fuel can be transported. Its force is just what we choose to make it. I never heard of an engine of more than about 1,500 horse power, but I have no doubt that engines twice as powerful, perhaps ten times as powerful might be constructed, and perhaps ten or twenty of them combined for one purpose.⁷⁶ And this force, irresistible when we wish it to be irresistible, may be so moderated as to be as gentle as the finger of a child. The force which at one part of the works drives a flywheel of twenty-tons weight so rapidly that the eye cannot see its circumference, in another room moves a cylinder so softly that it scarcely seems to revolve.

Of all the means by which human force has been increased, of all the means by which human toil has been alleviated, the steam engine is by far the most important. Of all the material elements of British wealth and of British power it is the greatest. And while we retain the superiority with which we now wield it, we need fear no competitor in mechanical or commercial industry.* ¹⁴⁶

As man's knowledge increases he combines for one purpose instruments of different species. The ancients knew the use of the hammer, but as they had no means of impelling it, except the human hand, its weight was limited by the force of the human arm. The invention of a hammer moved by water was a great improvement: it enabled the use of an instrument of many 100 times the force of a hand hammer. Its power, however, was limited by the force of the water by which it was worked; and its use was limited by the impossibility of moving that force from place to

place. The discovery of steam removed both these difficulties. It enabled an indefinite amount of power to be applied and to be applied wherever it might be wanted.* ¹⁴⁷

Instruments of comparatively little value while separate sometimes acquire great importance by being combined. If any one were asked what is the most important of modern inventions he would probably answer, printing. Man has grown more in the four centuries which have passed since the introduction of printed books than he did in the fifty or sixty which preceded it. But printing in its stereotype form, that is to say stamping, is one of the oldest of arts. We have coins stamped with legends many centuries before the Christian era. The superiority of a stamp to a pen was unperceived while the materials for books were parchment or the papyrus—one too expensive for ordinary use and the other too brittle. A cheap and durable substance for writing has indeed been known in China from time immemorial; but in the absence of an alphabet, paper was not much more useful for book-making to the Chinese than, in the absence of paper, printing was to the Europeans. As soon however as paper was brought into Europe printing was applied to it. And two inventions, each separately of little importance, have changed the course of human events by the combination.* ¹⁴⁸

One of the most important of productive instruments is a road. Without roads there can be little division and little combination of labor. Almost the first operation of settlers in an unoccupied country is to pierce the jungle by roads and to bridge the rivers. But in the absence of brute power roads assist but slightly the transport of commodities. A horse is a better instrument of transport than a man. Without wheels, however, the strongest horse can move only a few hundredweights; and wheels require a much more elaborate road than would do for a pack horse or a mule. From the rough roads of even our immediate ancestors, with their ruts and their steep ascents and descents, to the well-directed macadamized roads with which Europe has been intersected [since the third decade of the nineteenth century] was a prodigious advance.

A still greater advance was made when iron tram roads were introduced. On a rough road a horse can draw four or five times as much as he can carry. On a good common road he can draw four or five times as much as on a rough road. On a tram road he can draw ten times as much as on a good common road. His

speed however is less capable of increase than his draught. On no road can he go at a rate of more than twelve miles an hour—and not long or easily at that rate—and his power rapidly diminishes as soon as he exceeds two and a half. By substituting on the tram road the steam engine for the horse, unlimited power was obtained and velocity of which we do not yet know the limits, and which already is at least seven or eight times as great as that of horse power. The broad-wheeled wagon traveled at the rate of two and a half miles an hour. The slow trains go at that of between fifteen and twenty. The fast coach went ten miles in an hour. The express trains go fifty. And if we chose to encounter the expense and the risk that attended the fast coaches, we might fly at the rate of 100.

Again, when horse power is used, the expense is in proportion to the service. To transport ten times the load requires ten times the horses. It does not cost much more to carry 1,000 passengers by a railroad than 500, or 5,000 than 1,000.

The uniting the tram road and the steam engine to produce a railway was a combination almost obvious. It was the uniting to an instrument facilitating motion an instrument creating motion.

In other cases the compound instrument consists of portions which have little apparent connection. The creation of motion by steam and by electricity seem to have little in common. The electric telegraph however was long before it [was] separated from the railway. The railway at once gave the long level line along which the wire could be conveniently extended. If the railway had not existed it is improbable that we should have had the telegraph.* 149

5. The Qualities of Modern Machinery: Force, Dexterity, Uniformity, and Safety. The sentimentalists who endeavor to disgust the laboring classes with their position in a manufacturing country lament the slavery of a child, a woman, or even a man attached to a steam engine, and toiling to keep up with its unremitting energy. It is the engine alone that toils. It does all that requires force. The workman has only to supply it with materials and to perform the irregular and unforeseen services which cannot be obtained from an irrational agent. In the cotton manufacture all that the men, women and children have to do is to feed the furnace with coals and the boiler with water and to supply cotton wool to the carding machines; to take from them the carded fleece

and submit it to the roving frames; to take from them the slightly twisted yarn and put it before the mules; to watch the twist as it flows from the mule spindles and piece the strings that break; to reel off the finished twist, and place perpendicularly in the power loom the portion which is to form the warp and fill the shuttle with the weft; to watch the power loom as it converts this warp and weft into a piece of calico, and refill the shuttle as it empties itself; to place the end of a roll of calico between two cylinders one of which rolls it out and the other impresses on it a colored pattern and transmits it to a third which dries it and deposits it fold after fold a finished commodity.

Real hard work is confined to the employments in which motion is produced by the contraction of the human muscles. These are the employments to which we have recourse when we wish to make labor a punishment. We then substitute the treadmill for the watermill, the oar for the sail or the paddle wheel, the pickax for the blasting powder. We punish criminals by requiring from them the services which every Roman master exacted from his domestic servants.* ¹⁵⁰

As yet I have spoken only of the enormous, indeed the indefinite, force exerted by inanimate power. The assistance which it gives to human skill, though less remarkable, is very great. The mastery of most of the instruments which derive their force from the human arm and hand can be acquired only by long and early practice. The South American child begins to throw the lasso at three years old, and till he is grown up never sees a bird or a reptile within the range of his cord without trying to entangle it. Our ancestors began the use of the bow at as early an age and during their whole lives devoted to it a great portion of their time and strength. A few weeks' exercise will enable a grown man to use a musket with effect; a few months will make him a fair shot. Not one man in ten, even after years of practice, has nerve and skill enough to drive a fast coach. The trains on the Liverpool and Manchester Railway seem to have been driven as well the first week as they have been since.

Another quality of almost equal importance is the regularity of that force. Brute power is capricious. Human power varies with health and strength. At the first beginning of his work, "before his hand is in," and towards its conclusion, when his attention has become fatigued, the laborer does not possess his average efficiency; and even at best he cannot rely on always producing similar re-

sults. The results produced by a machine are identical. The first books which Faust printed he sold as manuscripts. But when it was found that they were identical he was in danger of being burned as a sorcerer. One must deal with the Devil, it was said, to produce two copies of the Bible without variation.

Among the less obvious advantages of this uniformity of action is the facility of verifying the quantity or quality of what is offered for sale. Every hank of hand-spun yarn must be examined, unless the purchaser will take its length and its fineness on trust. The hanks of mill-spun yarn of a given fineness are identical, or, if they differ, differ only in consequence of a difference in the material. The human hand is a varying, the spinning mule an unvarying agent.

Another consequence is increase of safety. Brutes are governed by instincts and passions which we cannot always foresee or control, since they are perhaps never precisely the same. I doubt whether there are two horses with precisely the same moral and intellectual qualities. The action of two steam engines made on the same model is precisely the same. They act therefore according to laws all of which can be known and all of which can be provided for. There are persons who think traveling by railways dangerous. I have no doubt that if the accidents to travelers by horse power were compared to those to travelers by steam it would be found that the danger is at least 1,000 times as great to the former as to the latter.*¹⁵¹

CHAPTER VI

EFFICIENCY OF CAPITALISTIC PRODUCTION: SPECIALIZATION AND COÖPERATION

1. Division of Labor and Mechanical Contrivances. 2. Advantages of the Division of Labor. 3. Effects of the Combination of Labor.

1. Division of Labor and Mechanical Contrivances. [In the last chapter it was pointed out how capital assists production in the form of instruments. I now propose to consider its other advantages, which consist in promoting the division and combination of labor.] Adam Smith rested the increase of wealth on a narrow foundation. He attributed it mainly to the division of labor,⁷⁷ and he believed the division of labor to be dependent on the use of capital. The term "division of production" would, I think, have been a more convenient one than "the division of labor." It expresses more clearly that the division which increases the powers of labor is the confining as much as possible each distinct class of producers to operations of a single kind. Adam Smith's authority, however, has given such currency to the term division of labor that I shall continue to employ it, using it however in the sense of division of production.

The advantages which he attributed to the division of labor are three: first, the increased dexterity of each particular workman; secondly, the saving of the time which is generally lost in passing from one occupation to another; and thirdly, the invention of tools and machines. He was the first writer who laid much stress on the division of labor. The force and the variety of the examples with which he has illustrated its effects make the first chapter perhaps the most amusing and the best known of his whole work. But like most of those who have discovered a new principle he has in some respects overstated and in others understated its effects.

I cannot agree with him in attributing to the division of labor the invention of machinery. That the division of labor has contributed to it there can be no doubt. The more the workman's attention is concentrated, the more likely he is to invent instruments to assist the few operations to which he is confined. This however

applies more to the simpler instruments, deriving their force from the human hand, which are generally called tools, than to those which produce motion independently of human exertion and which are generally called machines. The invention of machinery requires a knowledge of the laws of nature and habits of reflection and combination which seldom belong to those whose youth and adolescence have been occupied by manual labor.⁷⁸ Perceiving this Adam Smith attributes the invention or improvement of machinery partly to those who follow the trade of machine makers, and partly "to philosophers or men of speculation whose trade is not to do anything, but to observe everything." These two classes have certainly been great inventors, but the existence of philosophers can scarcely be said to be owing to the division of labor. It is not quite true that "in the progress of society philosophy or speculation becomes like every other employment the principal or sole trade of a particular class of citizens"—at least if by the words "progress of society" Adam Smith meant the progress of society in wealth. The causes which promote or retard the advance of philosophy are rather political and moral than economical. It flourished in Athens in a population scantily supplied with wealth. It decayed in Rome when she was enriched by the plunder and the tributes of the whole world. It has been stationary for centuries in China, while wealth and population have been growing.

Perhaps it would be a nearer approach to truth if, instead of attributing the use of instruments to the division of labor, we were to attribute the division of labor to the use of instruments. In a rude state of society every man possesses and every man can manage every sort of instrument. In an advanced state, when expensive machinery and an almost infinite variety of tools have superseded the few simple implements of savage life, those only can profitably employ themselves in any branch of manufacture who can obtain the aid of the machinery and have been trained to the use of the tools by which its processes are facilitated; and as a man can be complete master of only one or two tools, the division of labor is the necessary consequence.

In fact the use of tools and the division of labor so act and react on one another that in practice their effects can seldom be separated. Every great mechanical invention is followed by an increased division of labor, and every increased division of labor tends to produce new inventions in mechanism. I think, however, that the most convenient plan will be to treat the division of labor, and

the use of tools and machinery as two distinct causes of the productiveness of labor, allied indeed very closely, but not arising from the same principles of human nature nor causes of the same results.

Both are peculiar to man. Adam Smith considers the division of labor as a consequence of the human propensity to "truck, barter, and exchange." The propensity to use tools seems also to be an original principle of human nature. It is as peculiar to man as the propensity to exchange; and its growth, partly as cause and partly as effect, seems to increase with the increase of civilization. Few things in England are so striking to a foreigner as the abundance and variety of our tools.* ¹⁵²

2. Advantages of the Division of Labor. I have said that Adam Smith has in some respects understated the effects of the division of labor. Some of its advantages which he has passed by, or at least not formally mentioned, seem to me to be more important than those on which he has dwelt.* ¹⁵³

The chief advantages derived from the division of labor are:

First, the increased dexterity and skill of the producer as his attention and experience are concentrated in fewer objects. [This advantage, as we have seen, was first pointed out by Adam Smith.]

Secondly, the facility with which the results of a given exertion of labor may often be multiplied.* ¹⁵⁴

Thirdly, the enabling one country to enjoy many of the natural advantages of another.* ¹⁵⁵

Fourthly, the existence of retailers.* ¹⁵⁶

One of the principal of these advantages [which Adam Smith has omitted] arises from the circumstance that the same exertions which are necessary to produce a single given result are often sufficient to produce many hundred or many thousand similar results. The Post Office supplies a familiar illustration.* ¹⁵⁷ It does not cost more to forward 1,000 letters from London to Edinburgh than to forward one. By devoting exclusively to the duties of the British Post Office a few thousand persons there are received, forwarded, and distributed about a million of letters every day. A whole life spent in traveling would not enable a man of business to do for himself what the post does for him in a single week.* ¹⁵⁸

The utility of government depends on this principle. In the rudest state of society each man relies principally on himself for the protection both of his person and of his property. For these purposes he must be always armed and always watchful; what little

property he has must be movable, so as never to be far distant from its owner. Defense or escape occupy almost all his thoughts, and almost all his time, and, after all these sacrifices they are very imperfectly effected. "If ever you see an old man here," said an inhabitant of the confines of Abyssinia to Bruce, "he is a stranger; the natives all die young by the lance."

But the labor which every individual who relies on himself for protection, must himself undergo is more than sufficient to enable a few individuals to protect themselves, and also the whole of a numerous community. To this may be traced the origin of governments. The nucleus of every government must have been some person who offered protection in exchange for submission. On the governor and those with whom he is associated, or whom he appoints is devolved the care of defending the community from violence and fraud. And so far as internal violence is concerned—and that is the evil most dreaded in civilized society—it is wonderful how small a number of persons can provide for the security of multitudes. About 20,000 soldiers, and not 15,000 policemen, watchmen, and officers of justice, protect the persons and property of the 24 millions of inhabitants of Great Britain. There is scarcely a trade that does not engross the labor of a greater number of persons than are employed to perform this, the most important of all services.

It is obvious, however, that the division of labor on which government is founded is subject to peculiar evils. Those who are to afford protection must necessarily be intrusted with power; and those who rely on others for protection lose in a great measure, the means and the will to protect themselves. Under such circumstances, the bargain, if it can be called one, between the government and its subjects, is not conducted on the principles which regulate ordinary exchanges.⁷⁹ The government generally endeavors to extort from its subjects, not merely a fair compensation for its services, but all that force or terror can wring from them without injuring their powers of further production. In fact it does in general extort much more; for if we look through the world we shall find few governments whose rapacity does not materially injure the prosperity of their people. When we read of African and Asiatic tyrannies, where millions seem themselves to consider their own happiness as nothing compared with the caprices of their despot, we are inclined to suppose the evils of misgovernment to be the worst to which man can be exposed. But they are trifles compared to those which are felt in the absence

of government. The mass of the inhabitants of Egypt, Persia, and Burma, or to go as low as perhaps it is possible, the subjects of the Kings of Dahomey and Ashanti, enjoy security, if we compare their situation with that of the ungoverned inhabitants of New Zealand. So strongly is this felt that there is no tyranny which men will not eagerly embrace, if anarchy is to be the alternative. Almost all the differences between the different races of men—differences so great that we sometimes nearly forget that they all belong to the same species—may be traced to the degrees in which they enjoy the blessings of good government.⁸⁰

If the worst government be better than anarchy, the advantages of the best must be incalculable. But the best governments of which the world has had experience, those of Great Britain and of the countries which have derived their institutions from Great Britain, are far from having attained the perfection of which they appear to be susceptible. In these governments the subordinate duties are generally performed by persons specially educated for these purposes, the superior ones are not. It seems to be supposed that a knowledge of politics, the most extensive and the most difficult of all sciences, is a natural appendage to persons holding a high rank in society, or may be acquired at intervals snatched from the bustle and the occupation of laborious and engrossing professions. In despotisms, the principal evils arise partly from the ignorance, and partly from the bad passions of the rulers. In representative governments they arise principally from their unskillfulness. It is to be hoped that a further application of the division of labor, the principle upon which all government is founded, by providing an appropriate education for those who are to direct the affairs of the state, may protect us as effectually against suffering under ignorance or inexperience in our governors, as we are now protected against their injustice.

Another important consequence of the division of labor, and one which Adam Smith, though he has alluded to it, has not prominently stated, is the power possessed by every nation of availing itself, to a certain extent of the natural and acquired advantages of every other portion of the commercial world. Colonel Torrens is the first writer who has expressly connected foreign trade with the division of labor, by designating international commerce as "the territorial division of labor."⁸¹

Nature seems to have intended that mutual dependence should unite all the inhabitants of the earth into one commercial family.

For this purpose she has indefinitely diversified her own products in every climate and in almost every extensive district. For this purpose also, she seems to have varied so extensively the wants and the productive powers of the different races of men. The superiority of modern over ancient wealth depends in a great measure on the greater use which we make of these varieties.* ¹⁵⁹ By employing the Chinese to supply us with tea, the Americans with cotton and the trappers of Hudson's Bay or the Rocky Mountains with furs, we obtain in a temperate climate commodities and materials which nature produces only under tropical suns or in regions of perpetual snow.* ¹⁶⁰

We annually import into this country about ninety million pounds of tea. [This importation is effected by] a single trade—and that not an extensive one—[which] supplies as much tea, and that probably of a better sort, as could be obtained if England were twice as large as it is, and it were possible to devote every farm and every garden to its domestic production. The greater part of the advantage of rather importing than growing and manufacturing tea arises, without doubt, from the difference between the climates of China and England. But a great part also arises from the different price of labor in the two countries. Not only the cultivation of the tea plant, but the preparation of its leaves, requires much time and attention. The money wages of labor are so low in China, that these processes add little to the money cost of the tea. In England the expense would be intolerable. When a nation, in which the powers of production, and consequently the wages of labor, are high, employs its own members in performing duties that could be as effectually performed by the less valuable labor of less civilized nations, it is guilty of the same folly as a farmer who should plow with a race horse.

Another important consequence of the division of labor is the existence of *retailers*—a class who, without being themselves employed in the direct production of raw or manufactured commodities, are in fact, the persons who supply them to their ultimate purchasers and at the times and in the quantities which the convenience of those purchasers require.

When we look at a map of London and its suburbs, and consider that that province covered with houses contains more than a tenth of the inhabitants of England, and consumes perhaps one-fifth in value of all that is consumed in England, and obtains what it consumes, not from its own resources, but from the whole

civilized world, it seems marvelous that the daily supply of such multitudes should be apportioned with anything like accuracy to their daily wants. It is effected principally by means of the retailers. Each retailer, the center of his own system of purchasers, knows by experience, the average amount of their periodical wants. The wholesale dealer, who forms the link between the actual producer or importer, and the retailer, knows also by experience the average amount of the demands of his own purchasers, the retailers; and is governed by that experience in purchasing himself from the importer or producer. And the average amount of these last purchases affords the data on which the importers and producers regulate the whole vast and multifarious supply.* ¹⁶¹ The absence of retailers from Ireland materially aggravated the calamities of the late famine. Meal accumulated at the government depots, but there was no machinery to distribute it.* ¹⁶²

It can scarcely be necessary to dwell on the further advantages derived from the readiness and subdivision of the retailer's stock; or, to point out the convenience of having to buy a steak from a butcher, instead of an ox from a grazier. These are the advantages to which I formerly referred, as giving additional value to goods in a retailer's shop and, therefore, entitling them to the name of capital.* ¹⁶³

3. Effects of the Combination of Labor. Intimately connected with the division of labor is the combination of labor, or, the union of more than one producer in occasioning a single product. This is often, indeed generally, necessary [for] the division of labor. No persons could devote themselves to the production of arrows unless others devoted themselves to the production of bows, and *vice versa*. A watch consists of 992 pieces, produced by the laborers subdivided into 43 different trades.⁸² The workpeople in every one of these trades work in the confidence that all the other 42 sets of workpeople are also at work. Were any one to stop, the labors of all the others would become useless.

It is this which renders the strikes of certain classes of workmen peculiarly mischievous. The spinners form a small portion of the workpeople engaged in the cotton manufacture. Their labor requires skill which can be acquired only in infancy, and it is essential to the manufacture. If they stop working the other hands cannot long go on. By constantly holding over their masters' heads the threat of a strike, and sometimes carrying it into execution, they have succeeded in extorting wages far beyond

those of persons whose services are more laborious but can more easily be dispensed with. The colliers are another example. A strike among any considerable portion of them immediately raises the price of fuel in the neighborhood, and of course, if continued would stop all the manufactories which require an abundant supply. They have great power, therefore, which they use, as might be expected from ill-educated persons, very oppressively.

In the cases which I have mentioned, though the purpose is common, the exertions are dissimilar.

There are other cases in which a common purpose is effected by similar exertions. In the infancy of the mechanical arts this was the only mode by which great power could be exerted. Stonehenge must have been erected by thousands of men combining their force in one direction. In a battle there is often little division of labor. The success of a charge may depend on 10,000 men's all doing the same thing at the same instant. So in navigation the united force of the whole crew may be required to raise the anchor or to furl the sails. To obtain this concurrence is the object of discipline, and the means employed by discipline, are first, the appointment of a person who is to give the word of command, who is to say when and in what manner the united effort is to be made; and secondly, the training those who are to make the effort to the submission of their wills to that of the person in command.

The facility with which men submit to discipline depends partly on moral and partly on intellectual qualities. Some men are naturally docile. From self-distrust or from a tendency to veneration they wish to be under a superior and obey almost instinctively. Such is the character of the Slavonic and of many of the Asiatic races. Their docility depends on their moral qualities, and is consistent with a low degree of intelligence. Others dislike obedience in itself but submit to it when they find that it is their interest to do so. This is the general disposition of the Teutonic races. They are naturally indocile, but in proportion as they are intelligent they can be trained to sacrifice independent action when they see that such a sacrifice conduces to the general good. Races which, like the Celts, have neither docility nor intelligence must be governed by fear.* 164

CHAPTER VII

EFFICIENCY OF AGRICULTURAL CAPITAL: LAW OF DIMINISHING RETURNS

1. The Peculiarities of Land: Immobility and Power of Reproduction. 2. The Progress of Agricultural Development in Great Britain. 3. The Principle of Agricultural Production. 4. Some Exceptions to the General Proposition. 5. Carey's Critique of the Classical Doctrine. 6. Summary and Conclusion.

1. The Peculiarities of Land: Immobility and Power of Reproduction. I showed [already] the indefinite force which machinery gives to the human hand. I showed that by its use and by the division and combination of labor a few thousands of men can produce mechanical changes which millions could not have effected, each individual working independently. I showed also that this power of man to effect mechanical changes is still in its infancy, and that if the next two hundred years resemble the last, if the mechanical and chemical skill of the twenty-first century is as superior to that of the nineteenth, as the age of Victoria is to that of Cromwell, our posterity will look back to the present times as a period of rudeness and poverty. I showed too that the facilities afforded by nature are given only to capital, and increase as capital increases; and that as a general rule, the greater the quantity of materials collected, and the greater the amount of labor and machinery employed on them, the easier and the more effectual will be their conversion into commodities.

The power of capital in assisting the production of commercial changes is perhaps as great, though more obviously limited. For about £8 a ton tea can be carried from Canton to London, that is to say, at the rate of about a third of a farthing per pound for every 1,000 miles. We could do this however, though perhaps at three or four times the cost, two hundred years ago; we could do it at nearly the same rate fifty years ago. In short voyages, such as that across the Irish Channel, the invention of steam has produced great celerity and certainty; and it has given a rapidity to transport by land, on which no one fifty years ago would have ventured to specu-

late. But steam⁸³ is too expensive an instrument to supersede the sailing vessel or the canal. Means of doing this may still lie undetected among the secrets of nature—but I cannot venture to predict their discovery.

Our present power of effecting commercial changes is, however, sufficient to render the cost of transport almost an unimportant element in the finer manufactures. The difference of expense of bringing wool from Australia or from Saxony, that is from 15,000 miles off or from 500, is scarcely appreciable in the price of a yard of superfine cloth. The progress in agricultural improvement is much slower.

A steam engine and the machinery that it is to drive, the coals that are to feed it, and the cotton that it is to work up, may be carried to the place at the distance perhaps of half the globe where the labor which is to give life to these different instruments of capital is abundant. A farm is irremovable. If, like all other productive instruments and materials, land could be transported to the places where it is wanted, we should not—at least in the present state of the population of the world—have to complain of its limitation in quantity. There is land enough to feed and clothe ten times probably two hundred times, our present numbers. But its immobility limits the quantity accessible to the inhabitants of every district; and as they increase in numbers, forces them, unless they are willing to quit their own country, to have recourse to another peculiarity of land, its power of giving in an almost indefinite extent an increased produce to the increased application of labor.

Of no other instrument can this be said. No labor can work up a pound of raw cotton into more than a pound of manufactured cotton. Though the value of the manufactured product may be increased, there is an unsurmountable obstacle to the increase of its quantity. But from the same acre of land and the same bushel of seed, by applying more and more labor a return may be obtained of three bushels of corn, or of ten, or of twenty, or of forty. The reason is obvious. Quantity can be increased only by generation, and it is only as an agriculturist that man can obtain the aid of generative processes. In other employments he merely effects a mechanical or chemical or commercial change which alters the qualities, and may apparently diminish, but cannot increase, the quantity of the substances on which he operates. In agriculture⁸⁴ he is assisted by the generative powers of nature. She enables him

to convert a bag of seed-corn into a harvest; a couple of domestic animals into a flock or a herd.

The increased efficiency of increased agricultural labor is augmented by the circumstance that in agriculture man has not merely to call to his assistance the generative powers of nature but to contend against them. In proportion to the productiveness of the soil will be its tendency to produce weeds as well as vegetables. The food which would have supported man supports the wireworm, the turnip fly, the birds which consume the seed-corn and the plunderers of all sizes and of every genus, which attack the growing corn and infest the granary. The labor which increases the production desired by the husbandman requires the aid of labor employed in diminishing a production which interferes with him.

Take Barbados and Guiana (says a witness examined by the Commons Committee⁸⁵ on Sugar and Coffee in 1848) which are the two extremes, one of exhausted, the other of unexhausted soil—but with a very luxuriant vegetation and luxuriant climate. We have in the latter difficulty of keeping down the weeds in consequence of the vegetation and that difficulty is pretty nearly as great as the difficulty of manuring in the former.

Nor is it only by increased labor that man increases the quantity of agricultural produce. He effects as much, perhaps more, by increased skill. Those who have been dazzled by the miracles which an extended knowledge of the powers of nature sometimes works in manufactures and commerce are in danger of disregarding the apparently slow progress of agriculture. Its advance is not marked by the starts which suddenly double, or much more than double, the powers of the artisan or of the transporter of commodities. But in an advancing state of society the improvement of agricultural skill, though slow, is constant. Many mechanical inventions seem to be stationary. Within fifty years after the invention of printing men printed as well as they do now. We know of no modern rival of Elsiner. But it is probable that no agricultural process which was performed in England two hundred years ago is now in use and unaltered. Many have been discontinued as useless, those which are retained are improved. New methods are invented some of which, such as the introduction of the potato into Europe, triple at once the quantity of food which can be raised from a given extent of land and much more than triple that which can be obtained by the exertion of a given quantity of labor; and others, such as the

turnip cultivation of Norfolk, render fertile soils that once were almost valueless; or, like the improved system of draining, add generally to the utility of every species of soil.* ¹⁶⁵

2. The Progress of Agricultural Development in Great Britain. During the last 150 years the agricultural produce of England has more than quadrupled. To a certain degree this is owing to an increase in the quantity of cultivated land. Perhaps one-third of what is now arable or improved pasture was 150 years ago heath or fen or forest. But much more is due to improved drainage, improved manuring, the mixture of the subsoil with the superficial soil—which alone was used by our ancestors—an improved rotation of crops, and the introduction of vegetables and of varieties in our domestic animals all of which were unknown to them. One hundred and fifty years ago twenty bushels of corn to an acre was, what forty bushels is now, a large but not a remarkable produce; fifteen was less common than thirty is now—each bushel too weighed less. The proportion of bran to flour was much greater. So the number of head of cattle fed on a given extent of land was smaller, each beast weighed less, and of that weight the profitable portion bore a smaller proportion to the offal.

This additional quantity is obtained with a less proportional amount of labor.* ¹⁶⁶ Though the agricultural produce of England has more than quadrupled during the last 150 years, I do not believe that the agricultural population has doubled; still it is greater ⁸⁶ than is required. And yet our agricultural knowledge is in its infancy. What Talleyrand said of British education is also true of British farming: *C'est la meilleure du monde, et elle est detestable*. It is far below our skill in manufactures or in commerce.

Many causes have concurred to depress it. And it is a remarkable instance of the shortsightedness of legislation, even in a nation distinguished by its practical sense, that they have almost all arisen from attempts to promote it. The government of England and of Scotland, even in the earlier periods when the Crown retained great authority, belonged principally to the owners of land. They gradually succeeded to almost all the power which the Crown gradually lost, and from the Revolution to the passing of the Reform Act [in 1832] they were practically the masters of the empire. Their object—and it was not only a natural but a laudable one—was to increase the value of landed property and to secure the title [thereto].* ¹⁶⁷

To effect the [first] purpose they began, when our population was

small and poor, and the home market therefore was bad, by granting bounties on exportation, that is to say, by paying out of English taxes to the foreign purchaser a part of the price which he had to pay to the English producer. When the increase of our manufacturing and commercial industry had made us populous and rich, and the foreign market became inferior to the home market, they endeavored to make the better market still better first by prohibiting, and afterwards by subjecting to a high duty, foreign corn and cattle. And the continuance of these privileges seemed to be secured by a preponderance in England of the occupiers of land among the constituents almost equal to the preponderance of its owners in Parliament.* ¹⁶⁸

To effect the [second] purpose they covered its transfer *inter vivos*, and its transmission to devisees or heirs by a network of forms and technical rules which render every absolute or conditional alienation a source of great, and, what is much worse, of unforeseen, and therefore incalculable expense. The consequence is, its accumulation in large masses in the hands of the few rich men who can afford to purchase with the certainty of an attorney's bill, and the probability of a chancery suit.* ¹⁶⁹

Even now [1851], after the track has been buoyed by the decisions of centuries; after act of parliament on act of parliament has endeavored to widen and improve it; and after the courts of equity—with a courage and a good sense which are above all praise—have applied their powerful machinery to float us over its dangers and obstructions,—even now the English system of conveyancing is a disgrace to a civilized nation.⁸⁷

The law of real property, as created and administered by the common-law judges, instead of being a collection of rules founded on convenience, is an arbitrary science, like heraldry or astrology, or freemasonry, based on definitions and similes, and sacrificing without scruple both justice and reason, to preserve its metaphors unbroken. Thus one sort of uncertain future interest, called a contingent remainder, was said to be supported by a previous interest, which the courts thought fit to say must be an interest for life. If this interest was absent or destroyed, the support failed. Therefore, in pursuance of the metaphor, the remainder failed too. A science resting on verbal subtleties might have been expected to possess at least an accurate terminology. So far, however, is this from being the case, that the words *right*, *possibility*, *estate*, *contingent*, *executory*, *limitation*, *purchase*, *power*, and in fact most of

the important technical terms in conveyancing, are promiscuously used in half a dozen different senses; and grave decisions have been grounded, and even rules of law established, on syllogisms, in which the middle term was used in one sense in the major and in another in the minor.

But while the law dug these pitfalls around the honest purchaser, devisee, or inheritor, it devised a whole science, called the learning of *deforcement*, for the benefit of the fraudulent or violent intruder. It divided wrongful possessors into classes, such as *abators*, *disseisors*, *deforciant*s, and *intruders*, and allotted to them their several modes of defeating the claim of the lawful owner. I will illustrate its proceedings by a case within my own experience. A man without near relations devised his property to a friend who was not his heir. The devisee died a few days before the testator. The devisee's son thought it hard that such an accident should deprive him of an estate. Provisionally, therefore, he took possession; and consulted his lawyer as to the means of retaining it. The answer was, that he was an *abator*, and that the means given to him by the law for the purpose of defeating the lawful heir were, a *feoffment* and a *fine*. Both these proceedings were adopted. But on taking further advice, he was told that he had not used them in their proper order. He had, it seems, levied the *fine* before he made the *feoffment*, and the charm, therefore, would not work. So he reversed the process, first made the *feoffment*, and then levied the *fine*. Again, however, it was found that he had done wrong. Both the *feoffment* and the *fine* having been perfected during a vacation, the *fine* had reference to the preceding term, and overreached the *feoffment*. So he began again, and made a *feoffment* in one term, and levied a *fine* in the next. At last the professors of the dark art declared that the legal magic had been properly employed; and he is now the undisputed, indeed the indisputable owner. A recent Act of Parliament has destroyed this science by abolishing tortious conveyances; but until a few years ago they were in constant use. They were used by persons having terms of years, who wished to rob the reversioner of his fee simple; by persons in possession, who wished to despoil contingent remaindermen; and, as in the cases which I have mentioned, by mere intruders, who wished to seize on property to which they had not the shadow of a claim.

It is to this system, and to the expense and insecurity which it seems to have been intended to create, that we mainly owe one of our greatest political inconveniences, and dangers—the separation

of the great mass of our population from the ownership of land.⁸⁸ In the larger portion of Europe—almost everywhere, indeed, except in Spain, in parts of Italy, and in the British Islands—the greater part of the soil belongs to small proprietors.⁸⁹ They are less skillful than our farmers, but they are more diligent, more economical, and more provident. They marry late, and consequently have small families: in France the average number of children to a marriage is only three. They defend the rights of property, because they possess them; dependence on public relief or on private charity, instead of being as it is with us the rule, is the rare exception. From this fertile source of happiness and moral improvement our peasantry, indeed our middle classes, are cut off by our system of conveyancing.

The French peasant, as soon as he has agreed with his neighbor for the purchase of half an acre, goes with him to the *notaire*, and has it transferred into his name; and if he wishes to sell, can part with it as easily as he obtained it. A small purchaser with us has to ask for the abstract of the title, to send it to his lawyer, to pay for its being examined, to pay for further inquiries being made, to pay for the consideration of the answers to those inquiries, and, perhaps, after half a year's delay, finds that he has purchased a chancery suit. As the amount of these expenses in no respect depends on the value of the property—for the title to an acre may be as intricate as that to a whole manor—they operate as an almost prohibitory tax on small purchases. I once bought a small freehold as a qualification; the price was £40,—the expenses were £30.

To this cause, also, is to be attributed the comparatively low value of land in England. France is a poorer country than England, landed property there is a less advantageous investment: it is subject to enormous direct taxation, and does not give the social preëminence which attends it in England. But it sells for one-third more. Forty-five years' purchase is as common in France as thirty years' purchase is with us. If instead of clamoring for protection from foreigners, the landed interest had asked for protection from lawyers,—if they had required from the legislature, of which they are the most powerful portion, a rational system of conveyancing, they would have done what they failed to do,—they would have really raised the value of land.* ¹⁷⁰

Both in Scotland and in England the intricacy and expense of the system of conveyancing, by confining the ownership of land⁹⁰ to persons of large fortune, has thrown the cultivation into the hands

of tenants. The Scotch tenants, however, not having votes, were selected for their fitness as cultivators. As they had no duty to perform to their landlords, except the due management of the land and payment of rent, both of which could be secured by covenants they received leases. And as their relation to their landlord was not humiliating, men of capital and education became lessees.

The English tenant has been deteriorated and degraded by the franchise. Men have been chosen as tenants not because they were likely to be good managers of the land or good masters to their workpeople, but because they were safe voters. Their allegiance has been secured by refusing them leases. The insecurity of this tenure, and the obligation of following the politics of the landlord have repelled from agriculture most men of education and spirit, and thrown it into the hands of the poorest and most ignorant set of capitalists in the kingdom.

The want of leases has made any extensive improvement by the few tenants who have the means an act of imprudence. And even those who had leases were subject until the year 1834,⁹¹ to the rector's claim to a tenth of the gross produce of every improvement—a tax which in many cases absorbed the whole net profit of what in its absence would have been a profitable expenditure. If wheat is worth £2 a quarter and £100 expended in additional hoeing will add to the produce of a given farm fifty-five quarters, selling for £110, a net profit of £10, or ten per cent can be obtained; but while tithes existed the five quarters affording this profit would have been taken by the rector.

The unhappy system of poor laws and settlement laws which for the last 150 years has oppressed and debased the English peasantry, has aggravated these evils and has itself been aggravated by them in return. The laborer is entitled to wages or relief in the parish to which he belongs by settlement. From the times of Charles the Second to the end of the [eighteenth] century he was always liable, by law, if he left that parish to be sent back to it. Though that monstrous enactment has been repealed he is still in most cases removable by law from any other parish if any accident should force him to ask for relief; and when not removable by law he is often forced away in practice by the refusal of house room or of employment. The consequence is that in the pauperized portions of England—and there are few rural districts that do not deserve that epithet—the laborers are distributed not according to the demand for their services, but the accidents of their settlement. Their

right to relief gives them of course in practice a right to employment, since it is cheaper to pay them for work than for idleness; and the right to employment dispenses them from the obligation of diligence or care. In a naturally organized society the employer and the laborer has each a beneficial control over the other. The anxiety of the laborer to get wages forces him to be industrious and to endeavor to become skillful. The anxiety of the employer to obtain laborers forces him to pay to them the full value which their labor is worth; and I shall show hereafter that the higher this value the better it is for both parties.

But in a parish in which the number of settled laborers is excessive in proportion to the capital which is to employ them, the control which each party exercises over the other becomes mischievous. The employers can keep wages only just above the expense of parish relief since, if the laborer refuse employment on those terms, relief is his only alternative. And as the expense of relief depends not on the ability but on the wants of the applicant, the wages which supply its place accommodate themselves to the same standard. The bachelor is paid less than the married man, the man with two children less than the man with three. The laborer is treated like a horse or an ox fed, not according to his services, but his necessities. On the other hand the laborer keeps the value of his services just above the expense of parish relief. The strong unmarried man who is offered 6*d.* for a day's toil, while his neighbor with two children receives a shilling and his neighbor with four children eighteenpence, takes care to do only six pennies' worth of work. The great spur to improvement to the employer, the desire to make a given amount of labor more efficient, is wanting. A thrashing machine would not cost the wages of one man for a year, and would save the labor of two. But the two men are there and must be employed or relieved, so they are set to work with their flails. One good laborer imported from another parish would do the work of two lazy parishioners—but the parishioners are there and cannot be got rid of. A man conscious of superior strength and skill asks for task work. He is refused because it would only take the work from day laborers who, if they are not paid for doing something, must be paid for doing nothing.

From many of these influences the Scotch farmers are now free, and, until a few years ago they were free from all of them. Their tithes were fixed some centuries ago, and consequently at an almost nominal amount, and do not rise with the increase of the produce of

their lands. Poor rates are very low, for until the year 1841 no right to relief was practically admitted, and the lightness of the burden prevented the existence of the constant attempts at shifting it which derange the labor market of England. Until the Reform Act the electoral franchise was not connected with the occupation of land, it was rather a personal than a local privilege. Votes indeed have since been given to the Scotch farmers, and a right to relief to their laborers; and both may perhaps in time be degraded to the English levels: but for the present they both retain habits formed under a better system. The Celtic portion of Scotland is indeed still semi-barbarous, but in the Saxon portion, the lowlands, the agriculture is the best in Europe. And yet, I repeat, it is still in its infancy. The Scotch, like the English, were taught to rely on Protection: to believe that they were to make their profit rather out of a good price secured to them by Parliament than by a large and cheap produce obtained by their own skill. They were taught too to attach an extravagant importance to grain and to neglect the dairy and vegetable farming to which the British climate is peculiarly favorable. It was not until they were stimulated by the approaching abolition of the Corn Laws that they began to apply to agriculture the discoveries of modern chemistry and that they invented the subsoil plow and pipe draining.

I cannot but trust that the obstacles which have as yet retarded English agriculture will at no distant period be removed. Tithes are gone. Protection is sentenced, and to a great extent has expired. The exposure of the evils of the settlement laws contained in the evidence taken by the House of Lords Committee on the *Burdens on Land* in 1846 and by the House of Commons Committee on Settlement in 1847 cannot be long fruitless. The farmer will be able to choose the best laborers without incurring the odium of settling a stranger in the parish; and the laborer will become efficient when his wages depend on his diligence and skill. Political prostitution will no longer be required from the tenant. As public morality improves, landlords will feel that to extort an unconscientious vote is quite as base and far less excusable than to give one; or, if they persist in abusing their power, it will be taken from them, and the votes of their tenants will be concealed by ballot or rendered valueless by an extension of the suffrage. When the political subserviency of the tenant is no longer desired or no longer attainable, and free trade has produced steadiness of price the objections to leases will be at an end.

They will be granted as readily in England as they are in the Lowlands of Scotland.

I hope however that they will be less wanted. I cannot believe that with the example of the Continent before us, in a great part of which an estate is transferred as easily as a railway share is with us, we shall preserve our barbarous system of conveyancing. When land can be sold and mortgaged as easily as money in the funds it will be bought as a commercial investment. Men of capital will cultivate estates of their own, providing four-fifths of the purchase money by a mortgage and selling the whole as soon as they retire from business or change their occupation. The landed interest, freed from the swaddling clothes with which its ignorant friends have stunted it, will no longer creep behind its commercial and manufacturing rivals. We shall have agricultural millionaires occupying thousands of acres, adding steam power to animal power and fixed to circulating capital and founding their art on science instead of routine.⁹²

Many improvements in other arts will react on agriculture. Those which facilitate transit will not only open new markets to the cultivator but enable him to receive new materials. The deposits of guano at 10,000 or 15,000 miles distance would have been useless to us if their transport from Ichabod or Peru to Liverpool or London had been as expensive as it would have been 150 years ago. They would have been useless even if their transport from Liverpool to Lincolnshire or from London to Leicestershire cost as much now as it would have cost then. The invention of steam vessels rendered Bristol nearer to Belfast and London to Rotterdam than they would have been if Ireland and England had formed part of the Continent. Even the more perishable produce of the land—fruit, vegetables, eggs, and fresh butter—reach us now from Ireland and from Holland more cheaply than 150 years ago they could have been sent twenty miles. As soon as about 150 miles of road, from Carlstadt to Fiume have been made the produce of Hungary and Podolia, the most fertile plains of Europe, will arrive in London as easily in three weeks as it now can in four months.

The most important material of agricultural tools is iron. In many countries it is the most expensive. In the games at the funeral of Patroclus, Achilles proposes as the prizes for throwing the discus the iron discus itself. It could scarcely have weighed more than twenty-five or thirty pounds—for Polypætēs flings it as far beyond the marks of the others as a shepherd could fling

his crook: which supposes the whole cast to have been at least two hundred feet. Yet Achilles says that it contained as much iron as a man would use in five years in the cultivation of a large estate. He would have enough to sell to his neighbors. It must have been economized more anxiously than we economize silver.

The principal obstacle to the improvement of the agriculture of France, and indeed on the greater part of the Continent, is the dearness and badness of the iron. A large portion, probably three-fourths of the tools and machines used in a Scotch farm are unknown on the Continent; and in the greater part of the remainder wood, a much heavier material in proportion to its strength and less effective either as a lever or a wedge, is substituted for iron.⁹³ In England the cheapness of iron is such that the value of the material is an unimportant, often an almost inappreciable, element in the cost. The expense consists in the labor necessary to fashion it, and new mechanical inventions every year render that labor more efficient. Every invention which facilitates the smelting, the casting, or the forging of iron adds indirectly to the fertility of our fields.

I see no reason for doubting that while Great Britain retains her prosperity the future will resemble the past: that during every century which may elapse until unsuccessful war or a social convulsion shall terminate that prosperity—if, like all other things human, terminated it is to be—the produce of her land will increase; and that that increase⁹⁴ will be accompanied, probably occasioned by increased agricultural, commercial, and mechanical skill, and be obtained not with a greater but with a less proportional expenditure of labor.*¹⁷¹

3. The Principle of Agricultural Production. But, though an increase of the produce of land, which is accompanied by an improvement of the arts which directly or indirectly assist agriculture *may be, and generally is, obtained at a less proportional amount of labor*, it is certain that an increase not accompanied by such an improvement *is generally obtained by a more than proportional increase of labor*. This is the law announced by Sir Edward West and by Mr. Malthus at about the same time, illustrated and enforced by Mr. Ricardo and by Mr. James Mill, and frequently treated as one of the corner stones of political economy. It is thus stated by Mr. John Mill.

After a certain and not very advanced stage in the progress of agriculture; as soon in fact, as men have applied themselves to cultivation

with any energy, and have brought to it any tolerable tools; from that time it is the law of production from the land, that, in any given state of agricultural skill and knowledge, by increasing the labor, the produce is not increased in an equal degree; doubling the labor does not double the produce; or to express the same thing in other words, every increase of produce is obtained by a more than proportional increase in the application of labor to the land.

This general law of agricultural industry is the most important proposition in political economy. Were the law different, nearly all the phenomena of the production and distribution of wealth would be other than they are. The most fundamental errors which still prevail on our subject, result from not perceiving this law at work underneath the more superficial agencies on which attention fixes itself; but mistaking those agencies for the ultimate causes of effects of which they may influence the form and mode, but of which it alone determines the essence.

When, for the purpose of raising an increase of produce, recourse is had to inferior land, it is evident that, so far, the produce does not increase in the same proportion with the labor. The very meaning of inferior land, is land which with equal labor returns a smaller amount of produce. Land may be inferior either in fertility or in situation. The one requires a greater proportional amount of labor for growing the produce, the other for taking it to market. If the land A yields a thousand quarters of wheat, to a given outlay in wages, manure, etc., and in order to raise another thousand recourse must be had to B, which is either less fertile or more distant from the market, the two thousand quarters will cost more than twice as much labor as the original thousand, and the produce of agriculture will be increased in a less ratio than the labor employed in procuring it.

Instead of cultivating the land B, it would be possible, by higher cultivation, to make the land A produce more. It might be ploughed or harrowed twice instead of once, or three times instead of twice; it might be dug instead of being ploughed; after ploughing it might be gone over with a hoe instead of a harrow, and the soil more completely pulverized; it might be oftener or more thoroughly weeded; the implements used might be of higher finish, and more elaborate construction; a greater quantity or more expensive kinds of manure might be applied, or when applied, they might be more carefully mixed and incorporated with the soil. These are some of the modes by which the same land may be made to yield a greater produce; and when a greater produce must be had, some of these are among the means usually employed for obtaining it.⁹⁵

Long as this proposition lay undetected its truth is evident the instant that it is stated. It necessarily follows from the obvious fact that soils inferior in fertility or in situation to the very best

are cultivated. For if additional labor applied to the same extent of land could produce a proportional additional return, every farmer would select the best acre on his farm, confine to it his laborers and in order to produce a larger and larger return merely add to their numbers as long as they had standing and elbow room. There is not a county in England which does not contain cultivated lands of which the best yield five times as much return to a given amount of labor as the worst. The soils between these extremes may be considered as distributed into zones numbered from 1 to 5, yielding to one man's labor a return [as illustrated in the following statement]:

<i>Zone Numbers</i>	<i>Relative Yield</i>
1.....	10
2.....	8
3.....	6
4.....	4
5.....	2

The cultivation of each inferior zone shows that from that immediately superior to it additional labor would not, in the existing state of agricultural knowledge, give a proportional additional return. The same circumstances which occasion the cultivation of an inferior zone will generally occasion the application of additional labor, though with a less proportional return, to a superior zone.

I have already mentioned that one of the peculiarities of land is that within a limit, which perhaps has never been reached, it makes an additional return to additional labor. Suppose a man to occupy a farm of 300 acres: 100 very good, producing at an expense of £1,000—3,000 bushels; 100 inferior producing at the same expense 2,500; and 100 uncultivated but capable of producing at the same expense 2,000 bushels. Suppose him now to have £1,000 that he wishes to employ on his farm. It is highly improbable that he would find it advisable to employ the whole on any one division of it. He might begin by employing some of it on the 100 best acres; but according to the law which I have mentioned every successive £100 would produce a less proportional return. Perhaps after employing £300 on the best land he might find it advisable to go to the next best, and after employing £300 on that, he might still have £400 which could not be employed so profitably as in breaking up the 100 worst acres.

It is to be observed that while cultivation was descending from No. 1 to No. 5, the labor necessary to obtain a given return might be constantly diminishing. We will suppose each zone to contain 50,000 acres, and that cultivation ceases to be profitable as soon as four men produce less than 200 quarters from 100 acres, or fifty quarters per man. While agricultural skill is such that from No. 1, 2,000 men can produce only 100,000 quarters, No. 1 only will be cultivated. If now some improvement were introduced which increased by fifty per cent the efficiency of agricultural labor, it would be profitable to cultivate No. 2, from which 2,000 men would now produce instead of 80,000 quarters 120,000 quarters, or sixty quarters per man. It would of course be also profitable to employ more men in cultivating No. 1. Both operations might go on together and the question which of them would be most extensively adopted is a question admitting of no general answer. I use the example merely to show that under the influence of constantly advancing agricultural improvement worse and worse lands might constantly be cultivated, more and more labor might constantly be employed, and yet the labor necessary to obtain a given amount of produce from the worst land be constantly diminishing.

But while assenting to this proposition we must not forget that there is a point at which additional labor employed on the same land, even though directed by perfect skill, must cease to be proportionally productive. On a good soil, in the climate of England, and with the present English skill one man can with a year's labor raise from twenty acres about 600 bushels of wheat; but it is not likely that two men could raise 1,200 bushels. We may easily conceive however an increase of skill which would enable them to do so. But it is highly improbable that any skill would enable twenty men to raise 12,000. And it may be said to be absolutely impossible that 20,000 men should raise from twenty acres 12,000,000 of bushels. They would have scarcely room to stand on the ground.

The point at which a given piece of land may be said to be saturated with labor, that is to say, the point at which additional labor will cease to be proportionally productive, is one which differs with every difference in skill, in soil, in climate and in relation to the market for the produce. An active skillful man may find it advantageous to employ six men to every 100 acres, on the same farm in which his ignorant or careless predeces-

sor could not find profitable work for three. The general opinion seems to be that in England this point is seldom reached. In some cases without doubt it is reached and passed. The pleasure farm of many a gentleman and the fields of many a farmer in a pauperized district are cultivated to a degree not remunerative while that cultivation is directed by our existing knowledge. The increase of our knowledge will however soon overtake them, and what is called high farming now will be called low farming twenty years hence.

But though the increase of agricultural produce, when preceded or accompanied by an adequate increase of agricultural skill, *is obtained at a smaller proportionate expense of labor*, yet at every stage of this progress, if the whole quantity produced had been smaller, *the expense of producing that smaller quantity would have been not only positively but proportionally smaller*. This is, as I have already remarked, a necessary inference from the universal fact that in every agricultural country lands are cultivated which are inferior in fertility or in situation to the very best. We now produce annually in England about fifteen millions of quarters of wheat. I will assume, merely for the purpose of illustration, that the expense of producing and bringing to market the whole is fifteen millions sterling. It is obvious that different portions of it have been produced and brought to market at different amounts of cost, since they have been produced from lands differing in fertility and differing in their facilities of communication with their market.

To simplify the question however I will leave out the differences of cost connected with carriage, and consider the whole to arise from variations in fertility. Some portion must have been produced from land from which a given amount of labor would produce forty bushels of wheat and another from land from which the same amount of labor would extract only fifteen. And we have already seen that, assuming a given degree of skill, the same piece of land generally gives to every additional application of labor a less proportional return, and therefore would give to a diminished application of labor a greater proportional return. If, then, any circumstance should occur that should diminish the demand for wheat by one-third; if, for instance, one-half of the population of England were removed by an extensive emigration, and no foreign buyers took their place, and only ten millions of wheat were wanted instead of fifteen, the ten millions would

certainly be produced at a less proportional expense than the fifteen. The lands least fitted for corn would be laid down in grass and the least productive portion of the labor now employed on the land still devoted to corn would be withdrawn.* ¹⁷²

4. Some Exceptions to the General Proposition. The general proposition which I have endeavored to illustrate in [the last two Sections], namely, that in the progress of civilization ⁹⁶ *additional agricultural produce is generally obtained with a smaller proportional expense of labor*, is subject to some exceptions.

In the first place it does not apply to timber or to live stock. These are things of which the abundance depends more on the quantity of land which is devoted to them than on the mode in which that land is treated. The best timber grows spontaneously, and that which is planted requires little attention besides a fence. Its production therefore is little aided by skill. Accordingly we find standing timber abundant and valueless among barbarous and semibarbarous people, and gradually becoming more and more scarce and valuable as civilization and population advance and the land which was covered by it is wanted for other purposes. In such a country as England if trees were not desired for ornament or for shelter they would never be planted. What we want for the carpenter and shipbuilder and for fuel we can import from less advanced countries more cheaply than we can grow it.

Breeding cattle and smaller stock *does* afford room for skill, especially where the value of the land which it occupies renders it expensive, and losses are serious evils. But where land is plentiful it may almost be left to nature. The original stock should be well selected, and they will increase spontaneously. America in which there was not a horse when Americus first saw it is now full of them from Oregon to Patagonia. Captain Mackinnon ⁹⁷ tells us that at Corrientes, on the Paraguay 50,000 mares could be bought at a shilling a piece. The sheep of Australia are so abundant that a few years ago they had almost ceased to be worth the slight trouble of attending to them, though a single shepherd can take care of 1,200. Some value has since been given to them by boiling them down for their tallow and selling the product of a sheep for seven shillings. In the progress of improvement, therefore, vegetable food has a tendency to become relatively cheaper than animal food. In what have been called the hunting and pastoral states of society it is a rare luxury.

Adam Smith, writing in 1773, states that in almost every part of

Great Britain a pound of the best butcher's meat is generally worth more than two pounds of the best white bread, and in plentiful years is worth three or four pounds.⁹⁸ Now at present [1849] 8*d.* a pound for the best butcher's meat is a rather lower price than 8*d.* for the four-pound loaf of the best white bread. Meat at 6*d.* a pound is cheaper than bread at 6*d.* a loaf. Instead of saying, as Adam Smith does, that a pound of the best meat is generally worth more than two pounds of the best bread, a modern writer would say that it is worth four pounds.

A second exception, or rather a qualification of the generality of the proposition, is that it is true only if considerable periods be taken. The comparative abundance or scarcity of raw produce in the country in which it is produced depends so much upon the seasons, and, in the country which imports it, depends so much on the accidents of peace or war and of commercial legislation, that it is only on an average of years that we can say whether the tendency be towards greater abundance or greater scarcity.

Different crops are of course unequally affected by differences of seasons. Wine is more uncertain than wheat, and wheat than maize. Nor is the same season often favorable or unfavorable to every crop, or to the same crop on different soils. A wet year ruins the clays and enriches the sands. Still more depends on the area of supply. If we could ascertain the agricultural produce of the whole world we should probably find its principal variation from year to year to be a gradual augmentation as wealth and population increase. The wheat crop of England is sometimes deficient by one-third and sometimes in excess by one-third. The crop of a single acre may sometimes utterly fail and sometimes be three or four times as abundant as usual. Prices therefore are most steady in countries which depend greatly on importation. The whole world is their market, and scarcity or war, or legislation seldom affect more than a small portion of it at one time.

But of course in order to produce steadiness of price there must be steadiness of demand. Among the commodities which we import with the greatest regularity are tea, sugar, and cotton; and they are among the commodities of which the value has oscillated least during the last fifty years. The price has fallen with the increase of the importation, but the fall has been gradual and steady, with few of the sudden transitions from a high to a low and from a low to a high price which affect a commodity like corn, of which we have sometimes wanted ten or fifteen millions' worth in a year

and which we have sometimes excluded from our ports for four or five years successively.

Another exception to the general rule of the increasing abundance of agricultural produce as wealth advances is the case of a colony, that is, of a territory where emigrants have brought the arts of an old country into one unoccupied or occupied by barbarous tribes whom they have expelled or subjected to the gradual destruction, which always accompanies the contact of barbarism with civilization. After the first difficulties attending a new settlement have been overcome, if the climate and soil be good and the colonists intelligent and industrious, agricultural produce is obtained with a facility which shows itself in very low prices coexistent with high wages and high profits.

In the annual report of the Commissioner of Patents for the United States for 1847 are contained returns of the expense of raising wheat in several of the states of the Union. Among the elements of the calculation interest on the value of the fee simple of the land and buildings is always included, the grower being supposed according to the general custom of that country to farm his own land. The returns are as follows:

<i>Locality</i>	<i>Price per Bushel</i>	
	<i>U. S. Currency</i>	<i>U. K. Currency</i>
		<i>s. d.</i>
Unity, New Hampshire.....	\$1.20	5
Binghamton, New York.....	.63½	2 7¾
Fayette, Pennsylvania.....	.40	1 8
Jonesville, Michigan.....	.30	1 3
Plymouth, Wisconsin.....	.67	2 10½
La Salle, Michigan.....	.37	1 6½
Ashtabula, Ohio.....	.50	2 1
Prairie County, Washington ⁹⁹	.25	1 ½

It will be observed that as we recede from the old settled eastern coast, the cost diminishes from 5s. a bushel or 40s. a quarter in New Hampshire, to 1s. ½d. a bushel or 8s. 4d. a quarter in the western provinces. And yet we know that in the western country wages are higher than on the eastern coast. [It will, of course, be recollected] that these figures indicate the cost of bringing the wheat to market not the prices at which it is sold. Considering the high rate of profit in America, and particularly in the western states, the selling price is probably from twenty-five to fifty per cent higher. If we go further back still we find that in Oregon, in 1842 and 1843

prices were merely nominal, and the settlers' horses were fed with their finest wheats.¹⁰⁰

In our own colonies the cost of cereal produce, as far as it can be inferred from the price, is considerably higher. The return from Canada for the quarter ending July, 1848, states the average of brown bread at a fraction less than 5*d.* the four-pound loaf, and fine flour at £1 5*s.* the barrel of 196 pounds. These prices are about two-thirds of average English prices. But Canada East has been settled for more than a century. In Canada West, more recently settled, the price of flour is only £1 a barrel. In Nova Scotia in October, 1848, the price of bread was 6*d.* the four-pound loaf and wheat 4*s.* 10*d.* a bushel. In South Australia in 1847 bread was 5*d.* the four-pound loaf and wheat 4*s.* a bushel.

Several causes, all of which are probably not within our knowledge, may have contributed to this apparent difference between prices in our American colonies and in the United States. In the first place it may be only apparent. Prices in the United States may be nearly equal to those of our own colonies, the difference between them and the cost of production being made up partly of profit and partly of the expenses of transport. Or the superior capital and the superior energy and skill of the farmer in the United States, assisted often by better and more continuous labor, may enable him to grow wheat at less cost than our own colonists, many of whom are new to agricultural pursuits and many are very ill-supplied with labor. Even in our own colonies, however, with all their disadvantages of imperfect skill, irregular and uninstructed labor, deficient capital and detestable roads, while all manufactured goods far exceed European prices, agricultural produce is, as we have seen, about thirty per cent cheaper than in England.

This is generally accounted for by assuming that in every country the most fertile lands are the first cultivated: that in the progress of population, as more and more raw produce is wanted, worse and worse soils are gradually brought into cultivation; the land which for the time being has been most recently reclaimed being, as a general rule, inferior to all that was previously reclaimed. In a colony, it is said, the most fertile lands are open to the first occupier and the cheapness of raw produce arises from the circumstance that no others are cultivated.

This assumption is usually made in connection with a theory as to the progress of rent and profits, on which I shall have to remark when I come to consider Distribution. In [reading the] passages

which I shall quote from Malthus and Ricardo [the student] will bear in mind that I quote them with reference to the writer's opinion as to *the progress of cultivation*, not to his opinion as to its influence on rent or on profits.

At the commencement (says Malthus) of the cultivation of a fertile country by civilized colonists, and while rich land was in great plenty a small portion only of the value of the produce would be paid in rent. As the society continued to increase it is obvious that if the soil were of different qualities, the productive powers of labor as applied to the cultivation of land must gradually diminish and as a given quantity of labor would yield a smaller and smaller return there would be a less and less produce to be divided between labor and profits. But the physical wants of the laborer remain always the same. Consequently if poorer lands which required more labor were successively taken into cultivation a greater proportion of the whole produce would necessarily go to pay the wages of labor and the rate of profit would continue regularly falling.¹⁰¹

He goes on to show that commercial and manufacturing profits must follow those of agriculture and infers that

in the progress of improvement, as poorer and poorer lands are taken into cultivation the general rate of profits is limited by the powers of the soil last cultivated.¹⁰²

The same view is taken by Mr. Ricardo.¹⁰³

In the first settling of a country (he says) in which there is an abundance of rich and fertile land, a very small part of which is required to be cultivated, there will be no rent. When in the progress of society land of the second degree of fertility is taken into cultivation rent immediately commences in that of the first quality. When land of the third quality is taken into cultivation rent immediately commences in the second.*¹⁷³

5. Carey's Critique of the Classical Doctrine. A very intelligent American writer, Mr. [H. C.] Carey, denies the fact which is assumed as the foundation of this theory. He denies that the most fertile or the most conveniently situated lands are the first cultivated, and that the progress of population drives men to those which are inferior in quality or in situation. He believes that the lands which are capable of affording the largest amount of produce from their abundance of moisture, their strong spontaneous vegetation, or the depth at which the most fertile portions of the subsoil are buried, are those which require before they can be subdued the greatest

amount of capital and the greatest combination of labor. He believes therefore that they are the last that are cultivated; and that with every increase of population men conquer a better soil and extract from it a return more abundant not merely positively but relatively. The premises by which he supports these conclusions as respects America are so striking that I will [quote] them at considerable length.

The first settlers (says Mr. Carey) of the English race are found establishing themselves on the barren soil of Massachusetts, and founding the colony of Plymouth. The whole continent is before them, but, like all other colonists, they have to take what, with their means, they can obtain. Other settlements are formed at Newport and New Haven, and thence they may be traced, following the courses of the rivers but occupying in all cases the higher lands, leaving the clearing of timber and the draining of swamps to their more wealthy successors. Were we requested to point out the soils of the Union least calculated for the production of food, the choice would, we think, fall upon the rocky lands first occupied by the hardy Puritans, and thus we find that here at least the most fertile lands are not first taken into cultivation. If we look to New York the process is the same. The unproductive soil of the island of New York, and the opposite shore of New Jersey, and the higher lands on Long Island, claimed early attention, while the more productive soils came later into cultivation. Here, again, we find population spreading and following the course of the Hudson towards the Mohawk, but in all cases it will be found keeping the higher and drier lands, away from the river bank. The settlers desire food, and if they undertake to clear the forests and drain the meadows, they must starve.

On the shores of the Delaware, we find the Quakers selecting the light lands that produce the pine; and that, even now, with the aid of manure, will scarcely produce wheat: while forests of oak still cover the opposite shore of Pennsylvania. Every settler selects, too, the higher and drier parts of his farm, leaving the meadows, many of which have remained until now in a state of nature. The best portions of every farm are, invariably, those which have been most recently brought into cultivation, while the poorest lands of the various neighborhoods are always those on which are seen the oldest farmhouses.

If, passing westward, we cross the ridge of the Alleghany to the headwaters of the Ohio, we find the order of things inverted. Population at first is scattered, and occupies the higher lands, and the best timber is still standing: but as we descend the river, population and wealth gradually increase, the lower lands become more and more cleared, and at length we find ourselves at Pittsburgh, in the midst of a dense popula-

tion, actively employed in bringing into connection the several soils containing carbon, lime, and iron.

The early settlers of Ohio, Indiana, and Illinois, uniformly selected the higher grounds, leaving the richer lands for their successors. The immediate valleys of streams, fertile as were the soils, were and still are avoided on account of danger to be apprehended from the fevers which even now sweep off so many of the emigrants to the new states. The facility of getting some small crop, always prompted, as it still prompts, to the selection of the land which was most readily brought into cultivation: and none so well answered the purpose as that which was slightly clothed with timber, and clear of undergrowth. The constant fall of leaves had by their decay kept the ground covered with a light mold, and prevented the growth of grass: and by deadening the trees to let in the sun, they could obtain a small return to labor. The first great object was to have a dry place for the dwelling. Land which is entirely covered with timber has very imperfect drainage, and therefore the settler was found always selecting dry ridges of land on which to begin the work of cultivation; for the same reason which prevented him from commencing the work of artificial drainage to secure a place for his dwelling equally prevented him from so doing for any other purpose.

In the prairies, the richest land is found in the center of the prairie, and there can water be most readily obtained; while on the outer edges, as the surface descends towards the timbered land, it is less healthful, and water is obtained only by boring to a considerable depth, while the soil is far less rich: yet here invariably does the settler commence, as the center requires drainage, and three or four yoke of oxen to break up the tough sod. With each step in the progress of wealth and population, the new settlers are seen approaching nearer to the center and obtaining better soils at less cost of labor. While these are thus passing inward towards richer portions of the prairie, others gradually make their way down to the lower lands near the margins of the streams, but for want of drainage these are frequently overflowed, and then the labor is in a great measure lost.

Descending the river from Pittsburgh, we reach the confluence of the Ohio and Mississippi, where we lose sight of all signs of population except that of the poor wood-cutter, who risks his health while engaged in providing wood for the numerous steamboats. Here, for hundreds of miles, we pass through the most fertile land, covered with timber of gigantic size. With all its powers of production, it is valueless for all purposes of cultivation. Unembanked, it is liable to occasional overflow from the river, and its neighborhood is destructive to life and health: for which reason hundreds of thousands of acres that, when population and wealth shall have further increased, will yield the largest return to labor, remain uncleared and undrained; while the higher

lands, whose "original and indestructible powers" are less, are in a state of cultivation. Descending further, we meet population and wealth in the act of ascending the Mississippi, from the shores of the Gulf of Mexico. Embankments, or *levées*, keep out the river, and the finest plantations are seen on land corresponding in every respect with the wild and uncultivated region through which we have just passed. If, now, we desire to seek the habitations of the early settlers, we must leave the river bank and ascend the hills, and with every step we shall find new proof that cultivation invariably commences on the poorer soils. If we interrogate the pioneer settlers why they waste their labor on the poor soil of the hill-tops, while fertile soils abound, their answer will invariably be found to be, that the one they *can* cultivate as it stands, while the other they *cannot*. If we cross the Mississippi into Texas, and mark the site of the town of Austin, the center of the first American settlement, we find it to have been placed high up on the Colorado, while millions of acres of the finest timber and meadow lands in the world, totally unoccupied, were passed over, as incapable of paying the cost of simple appropriation. The whole tendency of colonization is towards the head-waters of the rivers.

We know of no exception to the rule, and we feel assured that none exists, or can exist. That it should do so, would be contrary to the laws of nature. The same reason that prompts the settler to build himself a log house while waiting until he can have one of stone, equally prompts him to begin cultivation where he can use his plough, and not to risk the starvation of his family by endeavoring to do so where he cannot. In every case on record, in which settlements have been attempted on rich lands, they have either failed totally, or their progress has been slow, and it has been only after repeated efforts that they have thriven. The reader who desires evidence of this fact, and of the absolute necessity for commencing with the poorer soils, will obtain it if he study the history of the French colonies in Louisiana and Cayenne, and compare their repeated failures with the steady growth of those formed in the region of the St. Lawrence, where numerous and somewhat prosperous settlements were formed at places where the land is now held to be almost utterly valueless, because better soils can be obtained elsewhere, by sinking deeper into the earth, or removing to a little distance. He may obtain additional evidence, if he will compare the gentle, but steady, growth of the colonies planted on the sterile soils of New England, with the repeated failures of colonization upon the richer lands of Virginia and Carolina, which latter could not be reduced to cultivation by men working for themselves; and hence we find the richer colonists purchasing negroes, and compelling them to perform the work, while the free laborer seeks the light sandy lands of North Carolina. Slavery would never have existed there could free laborers have been obtained,

but no man, left to himself, will commence the work of cultivation on the rich soils: because it is from those soils that the return is then least, and it is upon them, throughout all the new countries of the world, that the condition of the laborer is the worst, where the work is undertaken in advance of the wealth and combination that come, or ought to come, with time. The settler who sought the high light lands obtained food, although the return to his labor was small. Had he undertaken to drain the rich soils of the Dismal Swamp, he would have starved, as did those who settled the fertile island of Roanoke.

From Anglo-America Mr. Carey desires his reader to accompany him to Potosi where

he finds himself in a country without rivers, and almost without the possibility of irrigation, and where any failure of the periodical rains is followed by famine and death, yet if he cast his eyes downwards towards the coast, he sees a magnificent country, watered by numerous rivers, and in which the cotton and the indigo plant grow spontaneously; a country in which the maize grows with a luxuriance elsewhere unknown; one that might supply the world with sugar, and in which the only danger to be apprehended from the character of the soil is, that the crops might be smothered by reason of the rapid growth of plants that spring up in the rich earth, without aid, or even permission from the man who might undertake to cultivate it: *yet there he sees no population*. The land is uncleared and undrained, and likely so to remain, because those who should undertake to work, with the present means of the country, would starve, if they did not perish by the fevers that there, as everywhere, prevail among the richest soils until subjected to cultivation, and often long afterwards.

Passing on, he sees Zacatecas, high and dry like Potosi, yet cultivated. Keeping the ridge, he sees on his left Tlascala, once the seat of a great and wealthy people, far removed from any stream whatsoever, and occupying the high land from which descend little streams seeking the waters of both the Atlantic and the Pacific. On his right he sees the valley of Mexico, a land capable of yielding the largest returns to labor, that by slow degrees, with the growth of population and wealth, was once drained and rendered fit for cultivation. In the time of Cortes, the people were numerous and rich, and the fertile soils they had brought into activity produced food in abundance for forty cities. Population and wealth have declined, and the remaining people have retired to the high lands bordering the valley, to cultivate the poorer soils; and the single city that still remains draws its supplies of food from a distance of fifty miles, in a country where roads scarcely exist, the consequence of which is that corn is higher in price than in London or Paris while wages are very low. Fertile land is here superabundant, over which

roam half-starved cattle, seeking to obtain from the top soil—the only one used in this second childhood of agriculture—the nourishment which would be afforded in endless abundance, did the people possess the means and the industry to penetrate to those lower soils which were cultivated when population abounded. Not an acre in the hundred is cultivated at all, yet even with their imperfect machinery each one would yield twenty bushels. The people fly from it, whereas, according to Mr. Ricardo, it is that which would be first appropriated.

If, now, the reader look northward, towards the Caribbean sea, he will see the little dry and rocky islands of Montserrat, Nevis, St. Kitts, St. Lucia, St. Vincent, and others, cultivated throughout, while at his right stands Trinidad, with the richest of soils, remaining almost in a state of nature. If he will cast his eyes on the map and mark the position of Santa Fe de Bogota, and the city of Quito, the centers of population, where men cluster together on the high and dry lands while the valley of Oroonoko remains unoccupied, he will see exhibited on a great scale the same fact which, on a small one, we have shown to exist on the banks of the Schuylkill and the Susquehanna. If, next, he will take his station on the peaks of Chimborazo and look around, he will see the same great fact in relation to all southern America. He will see the only civilized people of the days of Pizarro occupying high and dry Peru, drained by little streams whose rapid course forbids the possibility that marshes should be formed in which vegetable matter may decay, to give richness to the soil for the production of timber before the period of cultivation, or of food afterwards. It was poor and easily cleared. It wanted no artificial drainage. It was therefore occupied.¹⁰⁴

Mr. Carey seems to suppose it to be a universal law that increased abundance is the necessary, or at least the constant, result of increased population; or, to state the proposition more at length, that the more numerous men are within a given district the better are the soils which they cultivate, and as a necessary consequence, the greater the return which a given exertion of labor produces.

Now I believe it to be quite true that in America each succeeding generation of European blood has cultivated a better soil. But the returns from America¹⁰⁵ and from Australia which I have quoted show clearly that the lands which are occupied in the earlier period of colonization, though not intrinsically the most fertile, yet afford their produce at a low proportionate expense. We have seen that the prairie farmer raises and carries twenty miles to market his wheat at a shilling and a halfpenny a bushel, while merely to raise it costs the New Hampshire man nearly five times as much.

If it be true, as Mr. Carey asserts, that as a country advances from the state of a colony to that of an old country a better and better soil is continually brought into cultivation, and if it be true, as it certainly is, that more skill and more labor are continually applied to that soil, Mr. Carey's inference that *everywhere* with increasing population the supply of food becomes more abundant was *a priori* a probable one. But we see that as a universal affirmative it is contradicted by facts. We see that in his own country the most populous districts are those in which food is least abundant, if facility of production be the test of abundance.

I believe, as I have said before, that Mr. Carey's proposition is true generally, though not universally, and that the circumstance which renders the state of a colony an exception to it, is not, as is usually supposed, the power of cultivating only the most fertile lands. Admitting that the colonist, from want of capital or of combined labor or from the unhealthiness of the rich bottoms and alluvial plains, is forced generally to occupy the higher grounds where the soil is dry and thin and unincumbered with timber but comparatively unproductive, I account for the lower cost at which he raises agricultural produce by the abundance of land unoccupied and capable of cultivation in a manner which the inhabitant of an old country would think rude, but which in proportion to the labor expended is highly productive. Thus we are told, in the Washington return, that the prairie farmer generally allows his land to lie idle every alternate year.¹⁰⁶

An English farmer (says Mr. Rae) who comes to North America almost always commences on the system which he followed in Britain. His agricultural implements, his harness, carts and wagons are all of the most durable and complete and, therefore, of the most expensive construction, and his fields are cultivated as carefully as were those which he cultivated in his native land. Some time naturally elapses before he discovers that he might do better by being content with more simple, and less highly finished implements, and that it will be for his advantage to cultivate less laboriously, though not less systematically. His neighbors, indeed, tell him from the first that if he expects the same profits as they have, he must have less dead stock on his hands, and give more activity to his capital; but he is slow of believing them.¹⁰⁷

This explanation reconciles two facts, neither of which I can deny, that in a colony first, the best lands are rarely those which are first cultivated; and secondly, that raw produce is raised at a com-

paratively low expense—or, in other words, is abundant. It is abundant for the same reason which makes vegetables more abundant when grown in fields than when grown in gardens—that it is obtained by less expensive processes. If England could be suddenly stretched to ten times its size the English farmers would copy the Americans; they would cultivate slightly the soils most easily worked, and obtain a far larger return from a far larger extent of more rudely cultivated and less productive land.

Of course [the reader] will carefully bear in mind that it is only on the condition of improvement in the skill and increase of the capital by which raw produce is obtained that an additional quantity can be procured at a less proportional expense; and that the improvement in skill and the increase of capital being given and continuing it is probable that, if the demand for raw produce were to diminish, the smaller quantity would be procured at a less expense than the larger quantity.

The demand in any country for raw produce depends mainly on the amount of its population. In every old country that is increasing in population—and there are few that are stationary—a struggle goes on between the increased demand for raw produce occasioned by the increased number of people and the increased means of obtaining it, occasioned by the increase of capital and skill. I have already stated that the latter element predominates generally. It would predominate universally if the advance of capital and skill were not sometimes retarded and arrested by the effects, direct or indirect, of foreign or civil war, or of bad legislation, and if unwise institutions did not sometimes promote a mischievous increase of population.

But though an increase of population more rapid than the increase of the means of obtaining raw produce is an exception to the ordinary course of human affairs, an increase of population more rapid than is desirable, an increase that though it does not diminish the share of each individual, though it even permits it to increase, yet occasions it to be smaller than it would be if the rate of its progress were slower—such an increase is not only common, but may be said to be the usual state of a prosperous country. With the exception of the fortunate communities which are in the state of a colony, where the skill and capital which have been gradually accumulated during centuries of advancing civilization have room to operate on a vast extent of thinly peopled territory, as is the case in North America and in Russia, there is scarcely a prosperous country that would

not be still more prosperous if its population were smaller, and if the rate at which that population is increasing were retarded.* ¹⁷⁴

6. Summary and Conclusion. Having explained the assistance which capital affords to manufacturing and commercial industry I proceeded to consider its efficiency in agriculture. On this subject the opinions of economists have apparently varied, as different parts of a complicated picture attracted their attention.

Adam Smith believed that in the progress of improvement the productiveness of agriculture in the rearing of cattle diminished, but remained nearly stationary as respects the cerealia.

In every different stage of improvement (he says) the raising of equal quantities of corn in the same soil and climate requires nearly equal quantities of labor, or, what comes to the same thing, the price of nearly equal quantities: the continued increase of the productive powers of labor in an improved state of cultivation being more or less counter-balanced by the continually increasing price of cattle, the principal instruments of agriculture. Corn accordingly is in all the different stages of wealth and improvement a more accurate measure of value than any other commodity or set of commodities.¹⁰⁸

The general truths that agricultural skill remaining the same, additional labor applied to the same extent of land will generally produce a smaller proportional return, and that, though directed by improved and improving skill, still there is, practically, a point at which every addition to the number of laborers must cease to be proportionally productive; and, theoretically, a point at which it must cease to be productive at all—at which the new laborer would merely impede those whom he found on the land—these truths, obvious as they now seem to us, were not perceived by him.

In his first chapter he lays down, as a universal law that

the division of labor, so far as it can be introduced, occasions in every art a proportional increase of the productive powers of labor. The nature of agriculture (he adds) indeed does not admit of so many subdivisions of labor nor of so complete a separation of one business from another as manufactures. The spinner is almost always a distinct person from the weaver, but the ploughman, the harrower, the sower of the seed, and the reaper of the corn are often the same. The occasions of those different sorts of labor returning with the different seasons of the year, it is impossible that one man should be constantly employed in any one of them. This impossibility is perhaps the reason why the improvement of the productive powers of labor in this art does not always keep pace with

their improvement in manufactures. The most opulent nations, indeed, generally excel all their neighbors in agriculture as well as in manufactures, but they are commonly more distinguished by their superiority in the latter than in the former. Their lands are in general better cultivated, and having more labor and expense bestowed on them produce more in proportion to the extent and natural fertility of the ground. But this superiority of produce is seldom much more than in proportion to the superiority of labor and expense. The corn of the rich country will not always in the same degree of goodness come cheaper to market than that of the poor. The corn of Poland, in the same degree of goodness is as cheap as that of France, notwithstanding the superior opulence of the latter country. The corn of France is as good, and in most years nearly about the same price as that of England, though in opulence and improvement France is perhaps inferior to England.

There is a confusion in this passage between cheapness, which refers to cost in money, and easiness of production which depends on cost in labor. Supposing that in the gold district of California four men could with a year's labor produce 600 quarters of wheat and that in England four men could produce only 200 quarters. Wheat would be comparatively easy of production in California—a given amount of labor would produce three times as much wheat as in England. But in England the wages of an agricultural laborer for a year seldom exceed £40. In California, at this instant [1850], it is supposed that a man can obtain in a year by washing the auriferous sands about 150 ounces of gold, worth about £600 sterling. Of course he would not work as an agriculturist for much less. The wages therefore of the four men who produced the 600 quarters in California would be nearly £2,400 or nearly £4 a quarter. The wages of the four men who produce 200 quarters in England are £160, or 16 shillings a quarter. No one can doubt which wheat would come cheapest to market. This is the reason why corn is now, as it was in the times of Adam Smith, though he seems not to have been aware of it, cheaper in Poland than in France or in England.

I was once sitting under the gallery of the House of Commons with a great Gallician proprietor during a corn-law debate. One speaker after another talked of the difficulty with which the English agriculturist must compete with the fertile lands of Poland.

The fertile lands of Poland! (said my companion.) The grain that I sow does not return me three for one. It would not feed half the people who cultivate it. But they live on rye and their labor costs me almost

nothing. And thus it is that I can sell in England and at the price of English wheat, wheat which has cost three times as much labor as would have been required to raise it here.

In this instance however, as in many others, the good sense of Adam Smith and the care with which he corrected his inferences by observation, though they did not preserve him from error, kept that error within narrow limits and prevented it from leading him to any important practical mistakes. His opinions on the progress of agricultural improvement, though inaccurate, approach more nearly to the truth than those of most of his successors.

The principle to which I have alluded, namely, that unless directed by increased skill, additional labor employed in the same superficies of land will generally produce a less proportional return and, even when so aided, may be applied to such an excess as to give no additional return whatever, is, as I have already remarked, obvious when once stated. Were the law of agricultural production different, if ten men employed on 100 acres could produce ten times as much as one, and 100 ten times as much as ten, and 1,000 ten times as much as 100, none but the very best patches of land would be cultivated, and half a dozen farms might feed all London.

But in the hands of Mr. Ricardo and of his followers the hypothetical proposition, that increased capital employed in agriculture, *if* unaccompanied by increased skill, produces a less proportional return became a categorical one. It was supposed that as a country advances in population it is constantly driven to cultivate worse and worse soils, or, what comes to the same thing, to apply less advantageously more labor to its soils already in cultivation, and consequently to obtain its agricultural produce at a constantly increasing cost.

When Mr. Ricardo wrote, there were many circumstances leading an English observer to these conclusions. For half a century we had been increasing in wealth and population, and during the whole of that period the price of raw produce had been rising—not indeed from year to year, but regularly, if decennial periods were taken. Nearly the same phenomenon, though less marked, was to be observed in France and Holland, and generally in the more wealthy parts of Europe. And it was a plausible inference that Adam Smith's proposition was the reverse of the truth, and that the corn of a rich country, instead of costing less labor, costs more than of a poor one. We now find that these appearances were fallacious.

During the last thirty years the wealth and population of England have increased with greater rapidity than at any previous period, and the price of corn has fallen as decidedly and more regularly than it formerly rose. It is now [1850] at about the same price that it was sixty years ago. It may be said that this is in a great measure owing to importation. If this were true it would be no defense of the theory. Political economy does not consider nations as surrounded by walls of brass. As it supposes a town to be fed from the surrounding country, it supposes that a densely peopled country may draw its supplies from thinner populations. It considers commerce as the rule and prohibition as the exception. But a similar process has taken place in countries which have not altered their corn laws—in France, for instance, and in Holland, in both of which the restrictive system is still in force.

An intelligent American, Mr. Carey, has adopted the opposite hypothesis. He believes it to be a proposition universally true that in the progress of wealth and population agricultural labor becomes more and more productive not only positively but relatively.

Everywhere (he says) we see men as population increases descending the sides of the hills towards the rich lands at their feet: everywhere, with the growth of numbers, penetrating the earth to reach the lower soils, to enable them to combine the upper clay or sand with the lower marl or lime, and thus compounding for themselves, out of the materials provided by the Deity, a soil capable of yielding a larger return than that upon which they were forced at first to expend their labors. Everywhere, with increased power of union, we see them exercising increased power over land. Everywhere we find that with increasing population the supply of food becomes more abundant and regular, and clothing and shelter are obtained with greater ease; famine and pestilence tend to pass away, health becomes more universal, life becomes longer and man more happy and free.¹⁰⁹

Now this is not universally true. It is true probably with respect to every country which gradually advances from barbarism to refinement. But when a country is in the exceptional state of a colony, that is to say, when the capital and moral and intellectual powers of a long civilized people are brought to bear on an unoccupied and practically an unbounded territory, it seems clear that every kind of agricultural produce is obtained with a facility which gradually disappears as the most fertile, or, what comes to the same thing, the most easily worked soils are appropriated and men are forced to exercise their labor less advantageously. I extracted from

the Report of the Registrar of Patents in the United States and from the accounts transmitted from our own colonies, returns which show that in the back settlements of America corn is grown at not one-half the expense which it requires on the comparatively densely peopled seaboard, and that it is grown in our colonies, at least thirty per cent cheaper than in England. And it is to be remembered that the increased productiveness of agriculture as civilization advances is confined to tillage. Timber, cattle, horses, and in general the commodities, which nature can generate and mature without human assistance, are usually most abundant when thus supplied by her spontaneously. We can import timber from the native forests of America, India, and Norway much cheaper than we can grow it; and if horses were as easy of transport as timber we should cease to breed them for profit.

But although in the progress of improvement both agricultural and manufacturing produce have a general tendency to become more abundant in proportion to the labor bestowed on them, or, in other words, to become easier of production, there is one point in which they obey different, indeed opposite laws.

With a few exceptions, of which the most important is water power, the instruments used in manufactures are universally accessible. In general they can be constructed where they are wanted, or easily transported thither. There is therefore no limit to the extent to which in manufactures labor may be divided and combined. Hundreds, or thousands, or hundreds of thousands of workmen may be collected; all the instruments and all the materials necessary to keep them at work may be brought to them; their tasks may be divided so as to allot to each the smallest possible number of operations; and the results of their labor may be so combined that each shall contribute his share to the general result. The consequence is that in manufactures only the best instruments and the most productive division and combination of labor are employed. The capitalists who possess these advantages find that the conduct most profitable to them is to go on increasing their production, by keeping their prices rather under those of their less favorably placed competitors, and thus to drive them out of the market. A further consequence is, that an increase in the demand for a manufactured commodity ultimately diminishes its price. At first, until the supply has been increased, the new demand increases the price: but more instruments, materials, and workmen are immediately collected; a still further division and combination of

labor becomes possible; machinery, which was too expensive to be previously employed, is erected; and the increased supply, while costing more in the aggregate, costs less in proportion. If only ten watches were wanted in a year those ten would probably cost £1,000; a million might be supplied at a pound a piece.

In agriculture just the reverse takes place. The principal instrument, land, is immovable. The soil of a country may be considered as a vast collection of instruments varying indefinitely with respect to their productiveness, to the facility of working them, and to the convenience of situation. The agricultural population is dispersed over the territory containing these instruments. It cannot be collected into masses. In England sixty men are more than enough to cultivate two square miles, or 1,280 acres; and a farm of that extent, unless it be mere down, is quite so large as can be well managed by one capitalist. There is little room, therefore, for the division or combination of labor; and little opportunity for the use of expensive machinery. The most productive or the best situated lands, or, in other words, the most eligible instruments, are of course the first occupied. As the demand increases, unless increased skill enable a larger produce to be obtained from the instruments already in use, others, either less productive or more expensive must be resorted to. Generally these operations are concurrent. Worse or more expensive instruments are used, but with increased skill; and the result is, as I have already said, usually a diminishing cost of agricultural produce as civilization advances. But this diminution of cost takes place not in consequence of the increased demand but in spite of it. If concurrently with the increase of agricultural skill the demand for agricultural produce were to diminish, or merely to remain stationary, the worst instruments would be thrown out of use, or less expensively worked. Less would be produced and at a less proportional expense. The cost of producing manufactured commodities has a tendency to fall as the demand for them rises, and to rise as it falls. The cost of producing agricultural products has a tendency to rise as the demand for them rises, and to fall as it falls.

In every advancing country a constant struggle is going on between the increase of population and of manufacturing and agricultural skill. On the results of that struggle, more than on any other single cause, depends national prosperity.*¹⁷⁵ [The causes which promote or retard the advance of population will constitute the subject matter of the next Part of this work.]

NOTES ON PART IV

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- ¹ *Public Wealth*, p. 222.
- ² *Progress of Society*, p. 59.
- ³ *Principles*, p. 89.
- ⁴ *Elements*, p. 19.
- ⁵ *Production of Wealth*, p. 6.
- ⁶ *Public Wealth*, p. 85.
- ⁷ *Distribution of Wealth*, p. 21.
- ⁸ *Wealth*, Vol. I, p. 294 [= *Political Economy*, Part I ("The Laws of the Production and Distribution of Wealth"), p. 294.]

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- ⁹ *Conversation*, p. 101.
 - ¹⁰ *Organization of Industry*, p. 28.
 - ¹¹ *The Laws of Wages, Profits, and Rent*, p. 51.
 - ¹² *The Elements of Political Economy*, p. 30.
 - ¹³ *The Principles of Political Economy*, p. 32.
 - ¹⁴ *Principles*, p. 96.
 - ¹⁵ *Definitions*, p. 237.
 - ¹⁶ *Principles*, Vol. I, p. 67.
- [To this list of English definitions of capital the author might have added that contained in his own *Political Economy*, to which he no longer adheres, viz: "An article of wealth, the result of human exertion, employed in the production or distribution of wealth" (Lop³, 60).]

- ¹⁷ *Cours Complet*, Vol. I, p. 224; *Traité*, Vol. 3, p. 271.

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- ¹⁸ Vol. I, p. 151.
- ¹⁹ P. 155.
- ²⁰ *Treatise on Wealth*, pp. 111-115.
- ²¹ *Systèmes*, Vol. I, p. 397; *Théorie*, Vol. II, p. 48.
- ²² *Économie Politique*, pp. 60-65.
- ²³ *Philosophie de l'Économie Politique*, Vol. I, pp. 29, 30, and 35.
- ²⁴ *Cours d'Économie*, Vol. 2, pp. 180-212.

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- ²⁵ Pp. 185-189.
- ²⁶ Vol. I, p. 171.

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- ²⁷ Vol. II, chap. 6, p. 229.
- ²⁸ S. 51.
- ²⁹ S. 129.
- ³⁰ P. 59.

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³¹ [It will be noted that the term "commodity" is used here in the ordinary sense of the word, as "object," "article," "product," or "thing"—not in accordance with the author's restricted definition.]

³² *Principles*, pp. 99–100.

Page 170.

³³ [Since capital or the productive use of material wealth, according to the author (see Chap. IV), is occasioned by abstinence—a human characteristic—in other words, since man himself is responsible for the existence of capital, is it logical to consider the latter as a distinct instrument of production rather than as a subsidiary tool of the former? If not, there remains but one primary instrument of production, namely man, and capital is simply a substitute for or an extension of the physical powers of the original instrument. Modern harvesting machines, for instance, are a development of the hand-method of agricultural production originally in vogue. The brute and inanimate agents are merely the passive raw materials without which human life could not exist. Man, however, is the active power which transforms those natural resources and directs them into productive channels. He molds clay into brick or digs stone from a quarry and arranges these and other building materials in the shape of a comfortable dwelling, instead of taking shelter under a rock or in a cave. With the growth of knowledge and skill man's control over his environment is proportionately increased.]

It seems quite evident, from the author's reference to profit and wages, that he deemed it necessary to so classify the instruments of production as to make them correspond with the well-known shares of distribution. But his casual remark (towards the end of the paragraph) that capital is productive of profit and man of wages, appears to be radically inconsistent with his fundamental theory of value and distribution (see particularly Part VI, Chap. II, sec. 1, and Chap. III, sec. 1; also Part IX, Chap. I, sec. 1). According to that theory, the accumulation of capital presupposes two distinct human sacrifices—labor and abstinence. For the trouble of mere labor the reward is wages, whereas profit is the compensation for the additional sacrifice known as abstinence. But since abstinence, as well as labor, is an attribute of man, what ground is there for the statement that the human instrument produces only wages? Again, the statement that capital is productive of profit sounds very vague. Profit for whom? Free man is the only productive agent that requires compensation for his services, and he is the sole recipient of both profit and wages. To speak of brute and inanimate agents as being remunerated for their services is scarcely in accord with the popular meaning of the word remuneration.

Senior, no doubt, meant to imply that in the ordinary course of individual transactions, wages are paid for the hire of one's services and profit is made on the investment of capital. But that view of the situation is evidently superficial. From a social standpoint, it is not true that capital is productive only of profit. As the author himself has clearly pointed out (Part IX, Chap. I, sec. 3; Chap. II, sec. 4; Chap. IV, sec. 2; and Chap. V, sec. 2), the wages even of the commonest laborers are materially affected by the use of capital. To be consistent, therefore, in his classification and nomenclature, the author should have adopted *industry* and *abstinence* as the two factors of production—the one rewarded by wages and the other by profit. The reward, in each case, is

in consideration of some personal sacrifice. The appropriation of goods involving no human effort is considered as economic rent.]

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³⁴ Section 61.

³⁵ [Note, however, the author's remarks under sec. 5 of this chapter.]

³⁶ *Definitions*, p. 258.

Page 172.

³⁷ Volume II, p. 207.

³⁸ Volume II, p. 201.

Page 174.

³⁹ *Principles*, Chap. I, sec. 4.

Page 175.

⁴⁰ [To the word *materials* Senior later added "and commodities." At a still later date (or, perhaps, immediately after writing those words) the author crossed out "and commodities." For the distinction between instruments, materials, and commodities see Part III, Chap. II, sec. 4. Note also the latter part of this section (which was written at a later date), where the author includes under circulating capital, commodities (when used productively) and money, as well as materials. It will be recollected, however, that according to Senior's definitions, commodities while employed for productive purposes are, in fact, "materials."]

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⁴¹ [*Cf.* Part II, Chap. III, sec. 3.]

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⁴² [Though Senior has devoted considerable attention to the question, whether necessities of life in the hands of the productive classes are to be included under capital, there seems to be a marked inconsistency in his views on the subject.

In the first place, according to the author's principles of classification, the different classes should be separated by real differences which are capable of being ascertained (Part I, Chap. III, sec. 3). But Senior himself has admitted (Part II, Chap. III, sec. 1) that no hard and fast line can be drawn between commodities that are necessities and those which are either decencies or luxuries. The inadequacy of the term necessities, as marking off a species of capital, becomes still more glaring when we recollect that, according to the author, captains of industry, legislators, artists, cobblers, hodcarriers—in short, the highest as well as the lowest classes of society—are all included among the "productive" classes.

Second, with reference to certain natural phenomena, such as atmospheric pressure and gravitation, the author, as we have seen, draws a distinction between conditions of existence and means of production. So the subsistence and shelter *that merely preserve a person's health and strength* are conducive to his existence, but could scarcely be regarded as species of capital; since, by the very definition, they are supposed to produce only health and strength, which, like knowledge and skill, are excluded by Senior from the term capital. The savage who appropriates for his immediate needs the roots and barks which nature has supplied for his preservation, may be temporarily in possession of a surplus stock of commodities. But Senior would certainly be the last one to

regard the savage as capitalist because of this surplus accumulation of necessities. It is not clear why, in a civilized community, the temporary surplus of mere necessities, intended for the laborer's or his employer's immediate consumption, should be treated differently from that in the hands of a savage.

Third, the author has insisted that capital is a relative term depending upon the use made of it. A house, for instance, in the builder's hands is capital, according to Senior, but after it is purchased for the purpose of residence, it ceases to be capital. Yet in the case of a laborer, Senior is bent upon calling, practically everything in his possession, capital. Why a capitalist's mansion should be considered merely as wealth and a laborer's bungalow, as capital, we fail to see.

Fourth, Senior excludes a lady's diamonds from the term capital because if he did so include them, it would "render unintelligible the well-established distinction between a man who spends his income and one who spends his capital." Now, as we know that in proportion as his income decreases the less a person can afford to spend on luxuries or even on comforts and the more he must spend on mere necessities (capital), it follows that the poorer a man is the greater is his expenditure from capital as compared with that from income; and in the case of a man who is capable of earning just enough to keep himself in health and strength necessary for his business, as he is obliged to spend all his earnings on mere necessities, in other words, being 100 per cent capitalist, he really never spends his *income*!]

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⁴³ *Wealth of Nations*, Book II, page 433.

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⁴⁴ [Book II, Chap. I.]

Page 185.

⁴⁵ ["This however is not a decisive mark, for it belongs to all who have only a limited interest in private property. It belongs to the tenant for life of an English, and to the tenant in tail of a Scotch estate. But in private property it is possible for a man to have an absolute interest. In public property he cannot have more than a limited one and therefore can alienate only for a limited interest, as he cannot put another in a better situation than his own" (Ln¹⁵, 39-40).]

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⁴⁶ [This refers to the ill-fated experiment made during the Revolution of 1848, the creation of national workshops. See Part X, Chap. I, sec. 4.]

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⁴⁷ [Cf. Part X, Chap. IV, secs. 1 and 2.]

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⁴⁸ [Senior began to write on national capital in 1835. The MS. outline of his pamphlet on *National Property* (RAP⁸) commences with the following statement:

"The great object of government is the preservation of the property of individuals. But to entitle an interest to protection, (1) it must belong to a determinate owner—that is be vested; (2) it must be lawful.

"No such interest can be taken away unless the welfare of the country require it, nor, if taken away for that purpose without compensation. But no invested

interest, no mere hope is entitled to protection or compensation; for if it were no improvement could be made. For every improvement injures many persons. Inoculation injures physicians, peace injures soldiers, sailors, contractors, etc.

"Nor is any unlawful interest to be pleaded. The owners of Old Sarum were not compensated for the loss they suffered by the Reform Bill, nor smugglers when the preventive service was established.

"It follows that all property to which there is no determinate and lawful owner belongs to the state. This is the case as to the fee simple of all the property in mortmain. The temporalities of the Bishops, the estates of Deans and Chapters, of colleges, and of all other corporations are subject to no determinate ownership beyond the life interests of the actual incumbents or corporators. It is the case also as to the fee simple of all advowsons which belong to Bishops and corporations. It follows also that the property of all those corporations which are mere trustees for indeterminate persons, belongs immediately to the state. If such corporations obtain any private advantage, that advantage being unlawful, is not entitled to protection.

"It is therefore the right, nay the duty of the state to provide that, subject to existing and vested lawful interests all this property be applied in the most beneficial mode."

Taking up the same subject again in 1848 while lecturing at Oxford, Senior followed his early views and treated as national capital the estates enjoyed by the Clergy and by the universities and colleges of England, Scotland, and Ireland (Ln¹⁵, 24). It was in that connection that he deemed it advisable to explain the differences between public and private property (see section 1 of this chapter). After making those remarks he wound up with the following statement:

"If it could be proved to be beneficial to the nation that the revenues of all the lands now considered as belonging to the Sees and to the colleges of England should be applied to some other public purpose, it might be done without injustice provided the persons in possession or with defined and appreciable rights of succession were adequately compensated. It is difficult indeed to suppose a state of things in which such an operation would be really beneficial, but on that supposition no one could fairly complain. Not the persons in possession or entitled to succession, for they are supposed to be compensated. Not the public, for it is supposed that they are benefited. Not the persons with mere hopes of becoming bishops, fellows or students, for they have no definite or appreciable interests" (Ln¹⁵, 43-45).

Two years later the author modified his views on the subject. In recapitulating his lectures on national capital, he proceeded to "dwell at some length" on that subject, "as I am not quite satisfied with the view which I took of it two years ago" (Ln²⁹, 30).

He began with a general statement as to the nature of different kinds of public property (see first section of this chapter), and stated furthermore:

"*Lastly* there is much property vested in corporations aggregate or sole who not only enjoy its revenues beneficially but have the *power of appointing their successors*. Such are all or most of the colleges in our Universities, and such are *benefices, when the incumbent is owner of the advowson*. When I last considered this subject I treated all these different kinds of possessions as national prop-

erty, subject in the two latter cases to the beneficial interests of the actual possessor. And as respects all these kinds of property *except the last* I continue of that opinion" (Ln²⁹, 34-35).

Again, in considering the volume of national capital devoted to secular education Senior remarked: "When I last [1848] considered this matter I included in it, as I have said, the property of the Universities and their Colleges. Omitting *that property* on the ground that," etc. (see text to which this note refers)].

⁴⁹ [This passage beginning with the words "The income of those reported," etc. to the end of the paragraph is a repetition of a similar statement given in Ln¹⁵, 21-22, except that the latter statement also estimates the annual value of the land and buildings belonging to the Universities and Colleges at £300,000 in addition to the £500,000 a year for the property of the endowed schools. As stated in the previous note, the college properties were later excluded from the author's estimate of the annual value of the national capital devoted to secular education.]

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⁵⁰ ["There is no employment of income," Senior wrote in 1861, "which may be made so useful as its devotion to public purposes. It produces a tax which nobody pays. No assignable individual is the poorer because the munificent estates which Wainfleet gave to Magdalen, or Henry VI to Eton, or Wolsey to Christchurch, are devoted to education, instead of being enjoyed by country gentlemen. The Legislature, therefore, has given to the creators of charitable foundations a power which it has refused to all other proprietors. For all other purposes, it admits that the successive generations of mankind have a right to make what use they like of the land unfettered, except for a brief period, by their predecessors. It admits, in short, that the land belongs not to the dead, but to the living. But if a man who has obtained the ownership of an estate chooses to say, 'This estate shall never again be the subject of inheritance or of purchase, it shall be devoted for thousands and thousands of years, in fact, as long as England remains civilized, to certain public purposes laid down by me, never to be departed from, never even to be varied, never to be accommodated to the ever-altering wants of society, to be carried into effect, not only when they have ceased to do good, but when they do actual harm'—if a man is presumptuous enough and short-sighted enough to say this, the law has made an exception in his favor, and has enforced, century after century, his posthumous regulations.

"This blind submission to the folly and tyranny of the dead was, to a certain degree, abandoned at the Reformation by the abolition of superstitious uses. It has been broken through, in particular cases, by special Acts of Parliament, and has been set aside extensively by the recent reforms of the Universities. But still it is substantially adhered to. We are told of whole villages reduced by a testator, George Jarvis, to a state below that of barbarism, for barbarians at least provide their own subsistence, whereas the miserable squatters in Staunton-upon-Wye, Bredwardene, and Letton, fed on alms, without industry or providence, unite the idleness, discontent, vice, fraud, and waste of the pauper to the ignorance of the savage.

"When the Legislature takes in hand the reformation of charities, I trust that it will abandon the doctrine of *Cy-près*. It is one of the *justes milieus* in which timid irresolute men delight, which oscillate between right and wrong, by

means of which such men avoid thoroughly abandoning a false principle or fully embracing a true one. If the charity land which we call ours really belongs to the dead, we have no right to alter their disposition of it except so far as to prevent that disposition from doing positive harm. If the authority to exercise interminable posthumous power which was conferred on them by their contemporaries is binding on us, it is completely binding. We have no more right to interfere with it than we have to prevent a living proprietor from wasting his property in extravagant building or fêtes.

"But if those who gave posthumous power to founders had no right to bind future generations; if the charity land belongs to the living, we are bound to turn it to the best account. No sentimental regard to the wishes or the hopes of those who have long ceased to hope or to wish, ought to prevent the Legislature from doing its duty to the public, and from applying the national property of which it is the trustee to the purpose by which *cestui que trust*, the nation may be most effectually benefited.

"That purpose is education." (RAP¹⁸, 378).]

⁵¹ [This was written more than 75 years ago. Since that time we have passed through successfully the Civil War, the war with Spain, and the bloody conflict with Germany; but the Lynch law, with all its shameful brutality and ruthlessness seems to be as popular as ever—baffling the wits of legislators and statesmen.]

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⁵² [Though written originally in 1848, this section was revised at a later date.]

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⁵³ *Travels in Peru* (Mrs. Ross's translation), p. 201.

Page 193.

⁵⁴ *Steam Warfare in the Parana*, Vol. I, p. 258.

⁵⁵ *Ibid.*, p. 248.

Page 195.

⁵⁶ [This section was written originally in 1848, but was revised in 1864, i. e., shortly before the author's demise. It will be observed that Senior traced the progress of wealth in England during the previous century. When he came to revise this passage, he inserted "1764" instead of 1748, which was the date given originally.]

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⁵⁷ [The author's distinction between the source of intellectual knowledge and that of moral truth appears to be founded upon traditional dogmas, which are incompatible with enlightened views on the subject. Senior fails to recognize the well-established fact that moral as well as intellectual, concepts have undergone radical changes since the days when revelation is said to have been in vogue. The institution of slavery, for instance, though sanctioned by revelation, has been done away with; polygamy is not supposed to be tolerated even among the Mormons; and indiscriminate almsgiving is no longer considered meritorious.

How many women nowadays would treat their husbands as infallible beings? But according to revelation, wives must submit themselves unto their husbands, as unto the Lord. "For the husband," St. Paul declares, "is the head of the wife, even as Christ is the head of the church. Therefore as the church

is subject unto Christ, so let the wives be to their husbands *in every thing*." This doctrine concerning the inferiority of the female sex began to lose its force with the age of chivalry and recently it has been utterly repudiated by the extension of equal suffrage rights to women in practically all civilized countries.

According to the Apostolic system of education, women are granted the privilege of learning in silence with all subjection. "But I suffer not a woman to teach, nor to usurp authority over the man, but to be in silence." Women are forbidden to speak in the churches. "And if they will learn anything, let them ask their husbands at home; for it is a shame for women to speak in the church." Do modern educators indorse this barbarous doctrine? Not at all. In many of our colleges and universities women enjoy the same privileges as men, and in most of the elementary schools female teachers are far more numerous than those of the "superior" sex. It is true that in the old-established churches women's rights are still restricted, but in some of the new sects women have attained the ascendancy over their former masters.

Again, St. Paul commands to "drink no longer water, but use a little wine for thy stomach's sake, and thine often infirmities." But, thanks to prohibitionists, it is now against the law of the land to procure a little wine, except on a doctor's prescription.

It is remarkable how a great mind like Senior's could have been overpowered, in this case, by the predominant theological doctrines of his generation. The underlying reasons for the fluctuation of moral concepts in different ages and countries have been touched upon by the author himself when he compared modern morality with that of the Stoics. (See Part I, Chap. I, sec. 2).]

⁶⁸ [The two kinds of abstinence—frugality and providence—will be explained in the next chapter.]

⁶⁹ [Cf. Part II, Chap. I, sec. 1.]

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⁶⁰ [Cf. section 4 of the last chapter, particularly the last two paragraphs.]

⁶¹ [The term *waiting* which some economists prefer is synonymous with the author's use of frugality—the species of abstinence which is of less importance than *providence*.]

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⁶² [Cf. last chapter, sec. 4.]

⁶³ [See Part V, Chap. VI, sec. 4 where it is shown that Irish "savages" have been transformed into excellent workmen under the stimulus of high wages and the American standard of living.]

It will be noted that Senior regards the existence of abstinence as a by-product of social institutions. Some economists, however, go a step further and are inclined to discard the concept of "abstinence" altogether. According to them, the individual is more or less of an automatic machine whose impulses, motives, and actions are influenced and regulated directly or indirectly by the social organism. They explain economic behavior, such as saving and the accumulation of wealth, by taking cognizance of political and social institutions, customs, commercial, and financial policies—such as the use of the corporate surplus, the organization of savings banks, investment banking, and business-promotion schemes in general.]

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⁶⁴ [John] Rae, [*Statement of Some Principles of Political Economy*, etc.], p. 136.

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⁶⁵ [Sometimes interest rates are artificially lowered. Thus, the natural advance of interest rates in the United States during the World War and for more than a year after the Armistice, was artificially retarded by the Government through the medium of the Federal Reserve System so as to facilitate the flotation of Liberty and Victory loans. By the beginning of 1920, however, the era of business expansion and price inflation had reached such a dangerous peak and the Federal Reserve "ratio" was so low that the Federal Reserve Board was forced to raise the discount rates and thus check the flow of money and credit. This sudden contraction of credit facilities precipitated the crisis of 1920-1921, which affected more or less every industry in the United States—particularly agriculture and other industries, such as implement manufacturers, mail-order houses, and railroads the incomes of which are directly dependent upon the financial condition of the agricultural sections of the country.]

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⁶⁶ [A concrete illustration of the waste of natural resources in a newly settled country is afforded by the history of anthracite coal mining in Pennsylvania, where millions of tons dumped in former years on the culm banks are now being reclaimed and sold under the name of "culm-bank washery." Another example is the exploitation and ruthless denudation of our timber lands under the inefficient régime of private ownership and management.]

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⁶⁷ [Cf. Part II, Chap. I, sec. 2 and Chap. II, secs. 2 and 3; previous chapter, sec. 3; and Part X, Chap. I, sec. 1.]

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⁶⁸ [Cf. Part II, Chap. I, sec. 1, and Part VI, Chap. I, sec. 4.]

⁶⁹ ["England under Elizabeth," Senior observes, "was perhaps the first example that the world had seen of real constitutional freedom, that is to say, of a state of things in which the sovereign, whether king or senate or assembly of the people, was not practically despotic—in which the property of individuals was not liable to arbitrary seizure, either to gratify the tastes of the monarch or to supply the necessities of the state" (Ln¹⁸, 50).]

⁷⁰ [Cf. Part II, Chap. I, sec. 2.]

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⁷¹ [See Part II, Chap. III, sec. 4; and Part IX, Chap. V, sec. 4.]

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⁷² [See Part X, Chap. I, secs. 3 and 4.]

Page 213.

⁷³ [The author, of course, had in mind the wretched conditions that prevailed in Ireland.]

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⁷⁴ [These terms have already been defined. See Part III, Chap. II, sec. 4.]

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⁷⁵ [The author's remarkable vision does not appear to have been keen enough to forecast the more extraordinary developments of modern warfare,

such as attacks from the air by flying machines and on the sea by submarine torpedoes; the use of machine guns, of armored caterpillar tractors, and of gasoline motor lorries; the discharge of tear bombs and asphyxiating gases; and the use of the telephone and the radio.]

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⁷⁶ [Even more significant than steam is electric power—little known in Senior's time—which can be transmitted by wire over long distances and utilized in innumerable ways. The building of 50,000-horse power generators is not unusual at the present time. The General Electric Company, Schenectady, N. Y., has recently constructed an 87,000-horse power generator consisting of ten steel castings, each of which is 21 feet in diameter and weighing 54,000 pounds, thus giving a total weight of 540,000 pounds for a single machine.]

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⁷⁷ "A man cannot," he says, "apply himself entirely to any peculiar business, unless there is beforehand stored up somewhere, either in his own possession or in that of some other person, a stock sufficient to maintain him, and to supply him with materials and tools till he has not only completed but sold his work. As the accumulation of stock must, therefore, be previous to the division of labor, so labor can be more and more subdivided only as stock is previously more and more accumulated. The quantity of materials which the same number of people can work up increases in a great proportion as labor comes to be more and more subdivided; and as the operations of each workman are gradually reduced to a greater degree of simplicity, a variety of new machines come to be invented for facilitating and abridging those operations. As the division of labor advances, therefore, in order to give constant employment to an equal number of workmen, an equal stock of provisions, and a greater stock of materials and tools than what would have been necessary in a ruder state of things, must be accumulated beforehand" (Book II, Introduction).

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⁷⁸ [This apparent restriction of the term "labor" to the class of *manual* workers is inconsistent with the author's views on the subject (see Part III, Chap. III, sec. 2). Such specialists as Edison, Steinmetz, and Marconi, who devote their efforts to the designing of mechanical devices, are *laborers* in Adam Smith's sense of the term and also in that which Senior himself uses in most cases.]

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⁷⁹ [Cf. Part VI, Chap. I, sec. 1.]

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⁸⁰ [It may furthermore be stated that most of the differences between persons residing in a given community are very largely the result of the training afforded them in their homes, in school, and in their workshops or offices.]

⁸¹ [Cf. Part VIII, Chap. III, sec. 2.]

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⁸² Wayland, p. 84.

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⁸³ [This passage was written in 1849, or more than thirty years after steam propulsion became an established fact. Yet at that time less than two per cent of British ships were driven by steam. By 1870, however, the British iron

steamer fleet grew to 1,100,000 tons, which represented about twenty per cent of the tonnage engaged in foreign trade. See Professor Alfred Marshall's *Industry and Trade*, 1919, p. 90.]

⁸⁴ ["Mr. [J. S.] Mill," Senior observes, "calls the opinion that nature lends more assistance to human endeavors in agriculture, than in manufactures, a conceit. It is founded, he says (*Principles*, Book I, chap. 1, sec. 4), on a confusion of ideas. Certainly the ground on which the Physiocrats maintained it—the rent of land—was insufficient. It is true, no doubt, that land affords a rent not because it is peculiarly productive, but because being productive, it is limited and appropriated. But though the reason assigned was inconclusive, the conclusion drawn by the Physiocrats was true, though not to the extent to which they carried it." A⁷, 318.]

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⁸⁵ Cd. 5722.

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⁸⁶ ["Through the greater part of England," Senior remarks, "the common complaint is that the farmers will not employ the laborers. Those who are not entitled to settlement in a parish are driven from it, lest they should take employment from those who are. The average wages obtained by an agricultural family do not amount to one-half of those obtained by a family employed in manufactures." Ln ¹⁹, 12-13.]

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⁸⁷ [The clumsy methods of transferring property began to attract Senior's attention quite early in his career as conveyancer. Testifying in 1832 before the Select Committee on a *General Register of all Deeds and Instruments Affecting Real Property*, Senior remarked that when he was first introduced to the subject he found that though every man's title depended on the fact, whether certain instruments had or had not been executed, yet there were no means of ascertaining that fact. It appeared to him strange "that titles should depend on pieces of parchment or paper, without any record of their contents, or any place appointed for their custody." On the appointment of the first Real Property Commissioners, in 1829, Senior submitted a paper containing detailed plans of improvement. Upon the recommendation of this Commission the general Register Bill was introduced in 1831, but no further action was taken on the matter for the time being. In 1846 a Select Committee of the House of Lords reported on the *Burdens Affecting Real Property*. In his testimony before this Committee Senior said:

"I believe that this is the only civilized country without a general register, and the only civilized country requiring sixty years' title, or even forty years'. I believe that in almost every country but this the transfer of property is effected in the books of a notary or a registrar, or some public officer, and that you require only the title of the person who sells. In fact land in almost every country but this is transferred in the same manner in which stock is transferred here. You look to the last purchaser only."]

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⁸⁸ [The advantage of the English system of land tenure is touched upon in the following extract from one of Senior's letters to Count Arrivabene, dated May 28, 1842 (M'):

"The great difficulties opposed with us to a more equal division of landed property were the old poor laws, the expense of our system of law, and the *greater profitableness of considerable estates*. The two first are much amended—but the latter continues; and I think will continue. A man with four or five thousand pounds finds it better to employ that sum as capital in stocking and renting a farm of 500 acres than in buying an estate of 70 or 80 acres. In the first case he may hope for a revenue of £500 or £600 a year; in the second not more than £150 or £160. Therefore the purchasers of estates are principally the rich, and they buy in large masses and manage them by stewards and farmers. How is the effect of this to be altered? How can we split land into small properties when it is more profitable to employ it on large ones? Many of the defects of our character seem to be essential to free institutions. Such is the excessive desire of wealth which, in a free country, is the road to power. Such is the fierce competition of our rival producers."

Some observers have regarded the system of large-scale farming as one of the means of exploiting the working classes. Senior however scouts this idea.

"I do not think" (he writes to de Tocqueville on Feb. 17, 1835, soon after the publication of the latter's work on *De la Démocratie en Amérique*) "that in England the wealth of the poor has been sacrificed to that of the rich. As far as my investigations extend, the wages of the English laborer are higher than those of any laborer. He has not landed property, because it is more profitable to him to work for another than to cultivate; but this depends on the same ground which makes it more profitable to work for a cotton manufacturer than to make stockings for his own use. It is a part of the system of the division of labor of which *la grande culture* is only an example." J¹, I, 3-4.]

⁸⁹ [The merits of the system of small landed proprietors are touched upon rather lightly in the following extract from Senior's Journal which was kept at Paris in the spring of 1861.

"We talked of the *morcellement* of property in France."

Hayward.—"This is John Mill's favorite system of peasant proprietors."

Senior.—"That system used to be praised as a preservative against revolution."

Beaumont.—"To be sure, it has not saved us from dynastic or political revolutions; that is, from revolutions affecting the depositories of power, but it *has* saved us from Socialist ones."

Senior.—"I should have thought that the man with only one acre would have liked a scramble out of which he might get two."

Beaumont.—"He was wiser. He thought with La Place, that a certainty of one acre was better than an even chance of two." J¹⁰, I, 197-198.]

⁹⁰ [According to Senior agricultural development in Great Britain was retarded mainly by the concurrence of two circumstances—the complicated system of conveyancing and legislative interference with the normal channels of trade. These obstacles, as will appear later, were aggravated in certain districts by the ill-administration of the poor laws and by the settlement laws. As regards the influence of the ancient institution of primogeniture, the reader's attention is directed to an interesting conversation on the subject between the author and M. Thiers, the French statesman. This conversation took place in Paris on March 27, 1852 (J⁷, I, 35-37).

Thiers.—"The English are the only people that I respect; the Italians the only people that I love; all the rest—the Russians, the Germans, the Spaniards, the Americans—excite my detestation or contempt, or more frequently both. But among your institutions there are some so opposed to my sympathies and judgment that I would not submit to them in order to obtain all your wealth and all your civilization. I have seen things at your *châteaux* at which I could scarcely avoid expressing my indignation."

Senior.—"What could they have been?"

Thiers.—"I mean the sacrifice of a whole family to one of its members. It is your detestable right of *primogeniture* which forces you to make slaves of a hundred millions of Hindoos, in order to enable an English younger son to consume the revenue that would have fed fifty Indian families, and to bring back a proconsular fortune. It is *primogeniture* which makes half your gentlemen exiles, and half your ladies old maids."

Senior.—"Like all foreigners, you exaggerate enormously the influence of our laws of *primogeniture*. In the first place it applies only to fee-simple lands, to a rental not amounting to thirty millions a year; in the second place it acts only in the absence of a will or a settlement; and, thirdly, it is only within a very narrow circle that what is called making an eldest son takes place. I have made thousands of wills and settlements, and not one in a hundred was based on any principle but that of equal partition. Where there is a fine place, an historical name, or a local influence which has lasted for centuries, a testator or a settler naturally gives to *one* things which cannot be divided without being destroyed; but those who are tempted to act thus necessarily form a very small class. As for India, it is the appanage not of the aristocracy, but of the bourgeoisie, who are quite unstained by the vice of *primogeniture*."

Thiers.—"How then are we to account for the number of your old maids? In France marriage is the rule, with you it seems the exception."

Senior.—"That arises from the difference in the proportion of children to a marriage. In France there are only three, in England nearly five. As a third of the children that are born die under age, a French couple has seldom more than one daughter to marry. An English family consists often of six or seven. The population of England has more than doubled in less than three hundred years. If our families were as small as yours we should have as few old maids."

Another important reason for the prevalence of old maids in England during that period, which the author should have mentioned, was the excess of male above female emigration. This, however, affected mostly the lower classes whom Thiers did not meet in the *châteaux* (cf. Part V, note 19).]

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⁹¹ [By an Act of Parliament tithes were commuted to a rent-charge in this year.]

Page 244.

⁹² ["Senior apparently did not appreciate that the law of diminishing returns acting more promptly in agriculture than in industry or commerce was sufficient reason to account for the failure of farmers in a race for the millionaire goal, and a deterrent keeping men with millions out, or mainly out, of agriculture." B. H. Hibbard.]

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⁹³ ["On this point Senior was wrong. While iron, and especially steel, is more desirable than wood, for several reasons, in the construction of agricultural machinery, the strength of many kinds of wood in proportion to weight is greater than that of iron." B. H. Hibbard.]

⁹⁴ ["In 1850 Caird estimated the acreage of wheat at 3,417,000 acres. In 1914 it was 1,906,000 acres, and in 1917, 2,106,000 acres. The yield in 1850 was estimated at 27 bushels per acre. Senior's estimate is 30 bushels." (See the first paragraph of this Section.) "In recent years it averages about 31 bushels.

"Senior seems to have had little appreciation of the international, or world economy, whereby England has become dependent on other lands for her food supply." B. H. Hibbard.

The reader's attention, however, is directed to Part VIII, Chap. III, secs. 1 and 3.]

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⁹⁵ *Principles*, Vol. I, p. 212.

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⁹⁶ [In Part VIII this subject will be further considered from the standpoint of international trade.]

⁹⁷ [See above Chap. III, sec. 3.]

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⁹⁸ Book I, Chap. II.

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⁹⁹ The expense of carrying to the market 20 miles is included [in this return].

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¹⁰⁰ Captain Wilkes, *Voyage of Discovery*, Vol. IV, p. 308.

Page 254.

¹⁰¹ *Principles*, p. 273.

¹⁰² *Ibid.*, p. 275.

¹⁰³ *Principles*, p. 55 [compare Part IX, Chap. V, sec. 1.]

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¹⁰⁴ *The Past, the Present, and the Future*, p. 25-38.

¹⁰⁵ [See preceding section.]

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¹⁰⁶ *Report of the Commissioner of Patents*, Washington, 1847, p. 409.

¹⁰⁷ Page 207.

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¹⁰⁸ Book I, Chap. I.

Page 265.

¹⁰⁹ *The Past, the Present, and the Future*, p. 48.

PART V

THE PRESSURE OF POPULATION ON THE
MEANS OF SUBSISTENCE

CHAPTER I

INTRODUCTION: POPULATION AND PROGRESS

1. The Problem relating to the Growth of Population. 2. Malthusianism: Its Merits and Defects. 3. Relative Increase of Population and Subsistence.

1. The Problem relating to the Growth of Population. It is now generally admitted, it is indeed strange that it should have required to be pointed out, that every species of plant or animal which is capable of increase must be capable of a continually increasing increase, every addition to its numbers being capable of affording a source of still further additions: or, in other words, that wherever there is a capacity of increase, it must be a capacity of increase not by mere addition, but by multiplication; or, to use the short form in which the proposition is usually stated, not in an arithmetical but in a geometrical ratio.

The rate at which any species of plant or animal is capable of increasing must depend on the average power of reproduction, and the average duration of existence of the individuals of which it is constituted; or, in other words, on its fecundity and its longevity. Fecundity depends partly on the amount and partly on the period of reproduction. Of these the period of reproduction is the more important.

The average reproductive power of maize is one hundred for one. In Europe one crop is produced every year. At this rate a single bushel might increase in two years by four places of decimals, that is, to 10,000 bushels; and in four years by eight places of decimals, that is, to 100 millions of bushels. In some of the tablelands under the tropics a crop is produced every three months. At that rate a single bushel might increase to 100 millions of bushels in one year, and in two years to sixteen places of decimals, or, ten thousand million of millions. The diminution of the period of reproduction by three-fourths augments the possible increase of two years from ten thousand bushels to ten thousand millions of millions. A reproductive power of ten exercised every six months is equal to one of one hundred exercised every year. Each renders

possible an increase of one hundred at the end of the first year and of 10,000 at the end of the second.

Given the fecundity of any species of plant or animal the rate of increase depends on its longevity. And generally, longevity is in inverse proportion to fecundity. The elephant for instance, which is among the longest-lived quadrupeds, is the least fruitful; its period of gestation is nearly two years, and it does not arrive at maturity till the age of twenty-four. Longevity affects the rate of increase far less than fecundity. The most short-lived animals are the most numerous and the most productive. For one elephant there are thousands of millions of mosquitos.

There are few animals, perhaps there is none, of which the possible augmentation is so slow as that of man. The longevity indeed of the human race is far beyond the average but its fecundity is very low. The reproductive power is low and the period of reproduction long. The arrival of puberty is comparatively late in both sexes and child bearing seldom lasts for more than a few years. Under the influence of these laws, the human race does not appear to be capable of increasing at a rate much more rapid than one which would double its numbers in twenty years; and there is no case recorded in which a numerous community has increased at that rate for a considerable period.

But we have an instance in which a whole nation, the United States of America, has for nearly a hundred years doubled its numbers every twenty-five years; and that rate, therefore, has been selected as representing the human power of increase. Numbers increasing at this rate proceed from a unit to more than a million in five hundred years. If, therefore, the population of the United States of America continue to increase at this rate for the next five hundred years, it will amount at the end of that period to more than twenty million of millions. The population of England has lately increased at about one-half this rate. It has doubled during the last fifty years. If it continue to augment at that rate during the next 1,000 years it will then amount to more than eighteen million of millions.

These results are obviously impossible in practice; but what are the causes by which they will be prevented? What are the checks which will retard the rates at which population is now increasing in the United States and in England—which will prevent the population of either country from reaching in 1,000 years or in 100,000 years the hundred-thousandth part of the

amount towards which it now seems to be steadily advancing? I will put the question in another form. Five hundred years ago the population of England was about four millions. If it had increased from that time at the rate at which it has increased during the last fifty years it would now amount to more than 4,000 millions. What are the causes which have prevented its doing so? Or, to state the question still more generally, what are the causes which keep the actual rate of increase in mankind so much lower than what appears at first sight to be its possible rate? * 176

2. Malthusianism: Its Merits and Defects. These causes were called by Malthus, the first systematic writer on the subject, the checks to population. He divided them into two classes to which he gave the names of the "preventive" and the "positive." The first consisted of those which diminish the number of births, the second consisted of those which accelerate the period of death: ¹ the first diminishing fecundity, the second diminishing longevity.

I will extract from his short pamphlet called *A Summary View of the Principle of Population* (p. 42) the following outline of his system in its maturest form:

If we consider more particularly the nature of the checks which have been classed under the general heads of preventive and positive it will be found that they are all resolvable into *moral restraint*, *vice* and *misery*.

Moral restraint, in application to the present subject, may be defined to be abstinence from marriage, either for a time or permanently, from prudential considerations, with a strictly moral conduct towards the sex in the interval. And this is the only mode of keeping population on a level with subsistence, which is perfectly consistent with virtue and happiness. All other checks, whether of the preventive or the positive kind, though they may greatly vary in degree, resolve themselves into some form of vice or misery.

The remaining checks of the preventive kind are, the sort of intercourse which renders some of the women of large towns unprolific; a general corruption of morals with regard to the sex, which has a similar effect; and improper arts that prevent the consequences of irregular connection. These evidently come under the head of vice.

The positive checks to population include all the causes, which tend in any way prematurely to shorten the duration of human life: such as unwholesome occupations, severe labor and exposure to the seasons, bad and insufficient food and clothing arising from poverty, bad nursing of children, excesses of all kinds, great towns and manufactories, the whole train of common diseases and epidemics, wars, infanticide, plague, and famine. Of these positive checks, those which appear to arise from

the laws of nature, may be called exclusively *misery*; and those which we bring upon ourselves, such as wars, excesses of all kinds, and many others, which it would be in our power to avoid, are of a mixed nature. They are brought upon us by vice, and their consequences are misery.

It is remarkable that among these checks Mr. Malthus has not included emigration. In the short abstract from which I have been quoting he does not allude to it. In the first edition of his larger work he considers and dismisses it in the following words:

A great emigration necessarily implies unhappiness in the country that is deserted. But to make the argument more general and less interrupted by partial views of emigration let us take the whole earth instead of one spot.²

Now the question whether the population of the whole earth can or cannot be kept down by emigration, is one with which we have no concern. Judging from experience it does not appear to be possible that within any period to which our anticipations extend—within, for instance, ten thousand years—there will be such a distribution of population, wealth, and skill over the whole earth as to saturate every portion with capital and people. And till this has taken place it will not be necessary to seek for means of reaching another planet. While one-half of the habitable globe is merely wandered over by tribes who obtain from it little more than a small portion of its spontaneous produce, and one-half of the remainder is uncultivated or cultivated so slightly as not to return one-tenth or perhaps one-hundredth of what moderate diligence and skill would extract from it, there will be room in it for an emigration which as I shall show hereafter would, under favorable circumstances, be one of the most effective means of checking the population for any single portion of the earth, though that portion were large enough to contain one of its most powerful nations.³

Nor is it true that a great emigration necessarily implies unhappiness in the country from which it has proceeded. One of the happiest countries in the world is New England, from whence a constant stream of emigration has proceeded during the whole of the last hundred years, and continues to proceed. Scotland is not an unhappy country, though it is admitted that the finest prospect which a Scotchman ever sees is the road which leads him to England.

In fact Malthus's views were to the end somewhat exaggerated.

and somewhat distorted by the train of thought which originally suggested them. They were gradually developed in the course of a controversy as to Mr. Godwin's expectations of the improvement of human happiness by the prevention of inequality, that is to say, by the abolition of property and rank. Malthus perceived that such an abolition would be eminently favorable to the rapid increase of population—to an increase in a geometrical ratio with a period of doubling not more remote, at furthest than twenty-five years. He perceived also that such a rate of increase could not be permanent, but must after a very few multiplications be checked. And the checks which he saw in operation around him were misery suffered or apprehended, or vice. The apprehension of misery he called, as we have seen, the preventive check, the endurance of misery, the positive check; and he showed that vice is sometimes preventive and sometimes positive. If he had been aware of the extent to which emigration may be carried or even of the extent to which it has [actually] been carried in England [in recent years], he would probably have modified his doctrines, and have admitted that population may, for a time at least, be checked by hope as effectually as by fear, and that bright prospects abroad may thin the produce of early marriages without the aid of infanticide or disease.

So exclusively indeed was Malthus's attention fixed on vice and misery as the checks to population that it was not until his work had passed through more than one edition ⁴ that he introduced among those checks moral restraint. The preventive check, when he first mentions it in the fourth chapter of his first edition, he defines "a foresight of difficulties attending the rearing of a family;" and he adds that the effect of this restraint upon marriage is but too conspicuous in the consequent vices that are produced in almost every part of the world—vices that are continually involving both sexes in inextricable unhappiness. And in the summary prefixed to the fifth chapter he expressly asserts that "all the checks to population may be resolved into misery or vice."

So little do I agree in these views that, though theoretically I admit that vice is one of the preventive checks, its influence seems to me so slight in civilized communities that for practical purposes I am inclined to disregard it. "The sort of intercourse which renders some of the women in large towns unprolific, and improper arts used to prevent the consequences of irregular connection" do not sensibly retard population. If we suppose that the births which

these causes prevent in England would amount annually to between seven and eight thousand we make a very large supposition. Now the births registered in England in 1846 were 572,620. On the supposition which I have just made they would rise in the absence of preventive vice to about 580,000. Such an augmentation would be practically imperceptible.

If indeed we give the name of vice to the celibacy of all those who do not live in perfect chastity, vice is a powerful preventive check. But this would be a strange use of language. It is not the celibacy which is vice but the unchastity. It is not the unchastity which prevents population but the celibacy. If vice were the cause of celibacy it might be said to be indirectly a check to population. But precisely the converse of this proposition is the truth. It is not vice that occasions celibacy but celibacy that occasions vice. The great cause of celibacy is not vice but virtue. It is generally the result of prudence. A gentleman will not marry with the chance of seeing his daughters governesses and his sons tradesmen. A farmer would feel degraded at being the father of a family of laborers; and the laborer, though far less under the influence of prudence than his superiors, must often hesitate before he calls in others to share the wages out of which he finds it difficult to save anything as a bachelor.⁵

Political and commercial revolutions and private imprudence, reduce every year in every European country thousands of families from opulence to poverty. But those families do not continue to form a portion of the inferior classes. They refuse to perpetuate themselves in a caste inferior to that of their immediate ancestors and gradually become extinct. A family voluntarily descending from its rank,⁶ a family in which the sons and daughters having to choose between celibacy and married life in a lower stratum in society have preferred the latter is a thing almost unheard of. And no one I think wishes the state of public feeling in this respect to be altered.

The general corruption of morals with regard to the sex, which Malthus includes among the preventive checks afforded by vice, has never within my knowledge kept down the numbers of any free and civilized community. I say *free*, because in the civilized countries which are cursed with slavery such a general corruption has sometimes taken place. It existed fifty years ago in Jamaica. I say *civilized*, because such a corruption is sometimes found in barbarous or semibarbarous countries—among the Nairs, for instance, of Malabar and in Hayti under its negro rulers, where it

probably has been inherited from the previous institution of slavery. And I believe its influence in such states of society to be considerable. But I know of no civilized community untainted by slavery in which the intercourse of the sexes has not generally been sanctioned by marriage, or in which the restrictions imposed by marriage have been so systematically violated as materially to affect the increase of population. Such violations have never been common except among the members of an idle and opulent aristocracy such as that of France in the eighteenth century. And even in that society, the most corrupt probably in this respect that has ever been seen, illicit intercourse was confined to married women and was never so promiscuous as to retard the increase even of that very small portion of the French people.* ¹⁷⁷

I have no criticism to make on Malthus's sketch of the positive checks except that which I have already made, that the omission of emigration renders it incomplete. Emigration however is not merely a positive check. It is capable, particularly if the plan which I shall have to explain—of sending out young couples—be adopted, of being used powerfully as a preventive check. All the other positive checks are destructive: they all allow reproduction to take place and then destroy, more or less early, the result. The word *destructive* appears to me to indicate their operation more clearly than the word positive. I shall therefore substitute it, and call the checks which diminish longevity the *destructive* checks. Emigration, which is in no respect destructive and only partially preventive I term the *remedial* check, and give to it, what its importance clearly requires, a place by itself.* ¹⁷⁸

3. Relative Increase of Population and Subsistence. There are few states (observes Mr. Malthus) in which there is not a constant effort in the population to increase beyond the means of subsistence. This constant effort as constantly tends to subject the lower classes of society to distress, and to prevent any great permanent amelioration of their condition. (Book I, ch. 2.)

And he afterwards repeats the same doctrine more explicitly in the following words:

According to the principle of population, the human race has a tendency to increase faster than food. It has therefore a constant tendency to people a country fully up to the limits of subsistence; meaning by these limits the lowest quantity of food which will maintain a stationary population.

It is obvious that if the present state of the world, compared with its state at our earliest records, be one of relative poverty, the tendency of population to increase more rapidly than subsistence must be admitted. If the means of subsistence continue to bear precisely the same proportion to the number of its inhabitants, it is clear that the increase of subsistence and of numbers has been equal. If its means of subsistence have increased much more than the number of its inhabitants, it is clear not only that the proposition in question is false, but that the contrary proposition is true, and that the means of subsistence have a natural tendency (using these words as expressing what is likely to take place) to increase faster than population.

Now what is the picture presented by the earliest records of those nations which are now civilized, or, which is the same, what is now the state of savage nations?—a state of habitual poverty and occasional famine; a scanty population, but still scantier means of subsistence. Admitting—and it must be admitted—that in almost all countries the condition of the great body of the people is poor and miserable, yet as poverty and misery were their original inheritance, what inference can we draw from the continuance of that misery as to the tendency of their numbers to increase more rapidly than their wealth? But if a single country can be found in which there is now less poverty than is universal in a savage state, it must be true that, under the circumstances in which that country has been placed, the means of subsistence have a greater tendency to increase than the population.

Now this is the case in every civilized country. In our own early history, famines, and pestilences (the consequences of famine) constantly recur. At present, though our numbers are trebled or quadrupled, they are unheard of. The United States of America afford the best ascertained instance of great and continued increase of numbers. They have afforded a field in which the powers of population have been allowed to exhaust their energy; but, though exerted to their utmost, they have not as yet equaled the progress of subsistence. Whole colonies of the first settlers perished from absolute want; their successors struggled long against hardship and privation; but every increase of their number seems to have been accompanied or preceded by increased means of support.

If it be conceded that there exists in the human race a natural tendency to advance from barbarism to civilization,⁷ and that the means of subsistence are proportionally more abundant in a civilized

than in a savage state—and neither of these propositions can be denied—it must follow that there is a natural tendency in subsistence to increase in a greater ratio than population.* ¹⁷⁹

It is true, [as Mr. John Stuart Mill expresses it], that

an increase in the demand for food, occasioned by increased population, will always, *unless there is a simultaneous improvement in production*, diminish the share which, in a fair division, would fall to each individual; and that, in that case, the population must either work harder or eat less, or obtain their usual food by sacrificing a part of their customary comforts.⁸

But I affirm that, in the absence of some disturbing cause—political rather than economical—such as the desire to create forty shilling freeholders in Ireland, or the poor-law abuses of the south of England, the increased demand for food and the increase of population are usually accompanied, or rather preceded, by improvements in production which occasions the increased quantity to be obtained, not at a greater, not at merely the same, but actually at a less proportionate expense of labor. Mr. Mill admits that such has been the case during the last twenty years in England. I believe it to have been the case in every portion of Europe. Even in Spain, notwithstanding her civil wars, even in the Netherlands, notwithstanding the previous density of population.

The instances of increased poverty, the cases in which men have been forced to eat less, or obtain food by sacrificing a part of their other customary comforts, have been cases not of the increase but of the diminution of population. They are cases like that of Roman Gaul when laid waste by barbarians, or of Bohemia after the Thirty Years' War, or of Asia Minor under the oppression of Turkey, or, to refer to still more striking examples, of the ruined cities of Central America, or of the deserted plains which surround the site of Carthage or of Palmyra, where there has been a waste of people but a still greater waste of capital and of industry, and half-starved savages eat their dates,

*Couched among fallen columns, in the shade
Of ruined walls, that have survived the names
Of those that reared them.** ¹⁸⁰

But although Mr. Malthus himself, in his earlier publications, has perhaps fallen sometimes into the exaggeration which is natural to a discoverer, the error, if he has committed one, does not affect

the practical conclusions which place him, as a benefactor to mankind, on a level with Adam Smith. Whether, in the absence of disturbing causes, it be the tendency of subsistence or of population to advance with greater rapidity, is a question of slight importance, if it be acknowledged that human happiness or misery depends principally on their relative advance, and that there are causes, and causes within human control, by which that advance can be regulated.⁹ These are propositions which Mr. Malthus has established by facts and reasoning which, opposed as they were to long-rooted prejudice, and assailed by every species of sophistry and clamor, are now admitted by the majority of reasoners, and even by a large majority of those who take their opinions upon trust.

The causes [which determine] the relative increase of subsistence and population [are numerous and exceedingly complicated]. At present I will only say that knowledge, security of property, freedom of internal and external exchange, and equal admissibility to rank and power, are the principal causes which at the same time promote the increase of subsistence, and, by elevating the character of the people, lead them to keep at a slower rate the increase of their numbers. [On the other hand] restrictions on exchange and commerce, artificial barriers excluding the great majority of the community from the chance of social eminence, and, above all, ignorance, and insecurity of person and property, are the general causes which both diminish the productiveness of labor, and tend to produce that brutal state of improvidence in which the power of increase, unchecked by prudence, is always struggling to pass the limits of subsistence, and is kept down only by vice and misery. I use the expression *general* causes, to exclude those causes which, being peculiar to certain nations, require separate consideration. Such are the superstitious desire of offspring in China, the political motives which formerly occasioned the creation of freeholders in Ireland, and the administration of the poor laws in some parts of England. But, omitting these details, it may be generally stated that all that degrades the character, or diminishes the productive power of a people, tends to diminish the proportion of subsistence to population, and *vice versa*; and consequently, that a population increasing more rapidly than the means of subsistence is, generally speaking, a symptom of misgovernment indicating deeper-seated evils, of which it is only one of the results.* ¹⁸¹

But although I believe that, as civilization advances, the pressure of population on subsistence is a decreasing evil, I am far from deny-

ing the prevalence of this pressure in all long-settled countries—indeed in all countries, except those which are the seats of colonies applying the knowledge of an old country to an unoccupied territory. I believe that there are few portions of Europe the inhabitants of which would not now be richer if their numbers were fewer, and would not be richer hereafter if they were now to retard the rate at which their population is increasing. No plan for social improvement can be complete unless it embrace the means both of increasing the production of wealth and of preventing population from making a proportionate advance. The former is to be effected by legislative, the latter by individual prudence and forethought. The former must be brought about by the governing classes of society; the latter depends almost entirely on the lower. As a means of improvement, the latter is, on the whole, more efficient. It may be acted upon or neglected by almost every one. But, in the present state of public opinion and of commercial and fiscal policy in Europe, perhaps a greater progress may be made by insisting on the former. The statesman who neglects either considers only a portion of the subject.* ¹⁸²

CHAPTER II

THE PREVENTIVE CHECKS TO POPULATION: PRUDENCE, LUXURY, LAW, AND LANDLORDS

1. *Prudence versus "Moral Restraint."* 2. *Effect of "High Living" on Fecundity.* 3. *Extrinsic Restrictions on Marriage.*

1. **Prudence versus "Moral Restraint."** We have seen that when Malthus admitted moral restraint among the preventive checks he defined it to be abstinence from marriage.*¹⁸³ Retaining the word "preventive" as designating the checks which diminish fecundity, I am inclined to substitute for the term "moral restraint" the term *prudence* and to disregard, as forming no part of the elements which an economist¹⁰ has to take into account, the question whether the prudence by which marriage has been retarded or prevented has or has not been accompanied by strict morality.*¹⁸⁴ [Malthus] seems to suppose that when once a marriage has taken place the number of births to which it will give rise depends merely on the age of the parties. And yet one would think that he must have been struck—certainly I have been much struck myself—at the great difference between the proportion of births to marriages in different countries. I extract from the Sixth Report of the Registrar-General a statement of the differences in this respect which exist between England, France, Prussia, Austria, and Russia.

To 3525 inhabitants 100 births are annually registered in France, 113 in England, 133 in Prussia, 136 in Austria and 151 in Russia. The small number of births in France is not accounted for by any difference in the proportion of the persons married, who are in fact more numerous in France than in any other country from which I have been able to obtain returns. It appears that 100 French wives have fourteen children, 100 Russian wives twenty-one children, yearly, or in other words 717 wives bear annually 100 children in France, and 152 children in Russia.¹¹

At this time the proportion of marriages, births, and deaths to the number of persons living [for the principal European countries] was as follows:¹²

<i>Countries</i> ¹⁶	<i>Proportion to Persons Living</i>		
	<i>Marriages</i> ¹³	<i>Births</i> ¹⁴	<i>Deaths</i> ¹⁵
England.....	1 to 131	1 to 31	1 to 45
France.....	1 to 121	1 to 35	1 to 42
Prussia.....	1 to 113	1 to 27	1 to 38
Austria.....	1 to 124	1 to 26	1 to 33
Russia.....	1 to 99	1 to 23	1 to 28

In 1833 the Poor Law Inquiry Commissioners obtained from the English diplomatic body returns ¹⁷ from many parts of Europe. I extract from them those which appear to depend on enumeration [rather than mere estimates].

<i>Place</i>	<i>Children to a Marriage</i>	<i>Proportion to Population</i>		
		<i>Marriages</i> (One in:)	<i>Births</i> (One in:)	<i>Deaths</i> (One in:)
Sweden.....	3 ⁶ / ₁₀	117 ¹ / ₂	29	41 ¹ / ₂
Denmark.....	3 ²⁷ / ₄₀	123	34	36
Lübeck.....	2 ¹¹ / ₁₈	177	53 ¹ / ₂	56
Württemberg.....	4 ³ / ₁₀	147	27 ¹ / ₁₀	31 ¹¹ / ₂₇
North Holland.....	5 ¹ / ₁₀	122 ² / ₁₀	30 ⁷ / ₁₀	} (cholera year) 30 ⁶ / ₁₀
Belgium.....	4 ⁷² / ₁₀₀	144	30	
France.....	3 ⁷ / ₁₀₀	131 ⁶ / ₁₀	32 ⁴ / ₁₀	

At this time the proportion of marriages to population in England, as deduced from the enumeration of 1831, was one in 128; the births to marriages were 441 to 100 [*i. e.*, 4 ⁴¹/₁₀₀ children to a marriage]; the births were one in 28, the deaths one in 49.¹⁸

I add from the *Annuaire de l'Observatoire Royal de Bruxelles* of 1848 the corresponding Belgian statistics for the years 1844, 1845, and 1846.

<i>Year</i>	<i>Children to a Marriage</i>	<i>Proportion to Population</i>		
		<i>Marriages</i> (One in:)	<i>Births</i> (One in:)	<i>Deaths</i> (One in:)
1844.....	4 ⁵ / ₁₀	145	31 ⁸ / ₁₀	44 ⁹ / ₁₀
1845.....	4 ⁴ / ₁₀	147	31 ⁸ / ₁₀	44
1846.....	4 ³ / ₁₀	169	36 ²⁶ / ₁₀₀	44 ² / ₁₀

These differences do not depend on differences in climate or in wealth. There are few countries which resemble one another more in these respects than Belgium and France. They do not

depend on a later age of marriage in France than in Belgium for the age of marriage in France, where the marriages are one in 121 of the whole population must be earlier than that in Belgium where they are only one in 153. They do not depend on a greater ratio of mortality in Belgium for the ratio is slightly in favor of Belgium. It is remarkable that [in 1828] when M. Quetelet published his *Recherches sur la Population dans le Royaume des Pays-Bas*, these differences did not exist. The marriages were then in France one in 138 and in Belgium one in 130. The births were then in Belgium 480 to 100 marriages and in France 476. During those twenty-two years the proportion of marriages in France has been constantly increasing, and the proportion of births to a marriage diminishing. The number of births in Belgium has remained about stationary—but the marriages have diminished till they are fewer than those of any other considerable country.

I cannot but believe that these facts are connected with one another, and that in France the diminution of births¹⁹ to a marriage by about one-third has enabled the number of marriages to increase by nearly one-fifth.*¹⁸⁵

2. Effect of "High Living" on Fecundity. Mr. Doubleday has produced a theory of population absolutely contradictory to that of Mr. Malthus. Malthus believed the great check to population to be insufficiency of food. Mr. Doubleday believes the great check to be excess of food.

The four following propositions comprise his theory:

First. That if any species, animal or vegetable, receives an immoderate supply of aliment it becomes plethoric, and ceases to reproduce itself.

Second. That if it received a moderate degree of aliment it reproduces itself but does not increase.

Third. That if it be stinted, if its aliment be insufficient in quantity or innutritious in quality, it increases rapidly.

Fourth. That if we suppose a species, an equal portion of which should be placed in each of these states, it would probably remain stationary in numbers, the deficient increase of one portion being compensated by the excessive increase of another.

In support of his propositions Mr. Doubleday refers to the general decay of aristocracies. The Roman senate, the British peerage, the British baronetage, the Venetian councilors of state, or, to take more homely instances, the Corporation of Durham, of Richmond, and of London have all been forced to recruit their

numbers by the admission of foreigners. On the other hand an Irish lessee of a patch of moorland, if the landlord does not interfere, will be found in forty or fifty years to be the progenitor of children and grandchildren more in number than the acres over which they swarm.

Among the lower animals he finds the same rule in full activity. A mare or a cow will not breed in high condition.

In the sheep (says Mr. Doubleday) this principle of increase is most nicely developed. It is invariably found that sterility follows over feeding. On the other hand if the animal is in a state of leanness a produce of one, two, or three lambs take place. Upon their knowledge of this fact flock masters are accustomed to act. In order to afford the best chance of a perfect animal it is believed that only one lamb at a birth is desirable: and this the breeders of sheep continue to secure by apportioning the food of the ewe to such a nicety as to avoid sterility on the one hand and a double or triple birth on the other.²⁰

So in the vegetable kingdom if a tree, plant, or flower be placed in a mould either naturally or artificially too rich for it a plethoric state is induced and fruitfulness ceases. In trees the effect of strong manures and over-rich soils is that they run to superfluous wood, blossom irregularly, and chiefly at the extremities of the outer branches, and almost or entirely cease to bear. With flowering shrubs and flowers the effect is, first that the flower becomes double and loses its power of producing seed, next that it almost ceases to flower. In order to remedy this state gardeners and florists are accustomed to produce the opposite or deplethoric state, which they call giving a check. In other words they put the species in danger, in order to produce a corresponding effort of nature to ensure its perpetuation, and the end is invariably attained.

Thus in order to make fruit trees bear plentifully the rising of the sap is impeded by barking. This to the tree is the production of a state of depletion, and the abundance of fruit is an effort of nature to counteract the danger. When a gardener wishes to save seed from a cucumber he does not give the plant an extra quantity of manure or warmth. He does just the contrary—he subjects it to some hardships and takes the fruit that is least fine looking, knowing that it will contain the most seed. Immediately before the death or sudden cessation of fruitfulness in a tree or shrub it is often observed to bear abundantly. This is remarkably the case with the pear or apple when the roots touch the harsh blue clay or any other soil inimical to the health of the tree. It is a last effort to perpetuate the species and is the effect of the state of depletion through which the tree passes to sterility and death.²¹

Some facts which to a certain extent support Mr. Doubleday's theory are to be found in Dr. Mitchell's report under the Factory

Commission of 1834. In the village of Katrine, in Argyllshire, he examined forty-two married women who had worked all their lives in a factory. They had borne 310 children, being rather more than $7\frac{1}{2}$ a piece. He examined fifty-eight who had lived the ordinary hard life of women of the lower classes in Scotland. They had borne 360 children, being within a small portion of eight a piece. At Deanstown in Perthshire he examined twenty-three of the latter class. They had borne 170 children being about $7\frac{1}{3}$ a piece. A degree of fecundity approaching this would not be found among 123 ladies taken at hazard. The difference however is probably less than it appears to be. Whatever be the influence of poverty on the breeding of children there is no doubt that it is unfavorable to rearing them. It is probable that the 123 women examined by Dr. Mitchell had lost in the first year of infancy at least twice as many children as would have perished in the nurseries of persons in easy circumstances. And this circumstance by diminishing the period of lactation must have been favorable to an increased number of births. The increased fecundity was produced, as is often the case, by a diminished longevity.

I do not attach much importance to the extinction of dignities, such as almost all those mentioned by Mr. Doubleday, which are transmissible only in the male line. An uninterrupted succession from male to male cannot be expected to last for centuries. Nor on the extinction of races, like the noble families of Spain which intermarry within a narrow circle. They degenerate and perish like our bloodhounds and King Charles's spaniels by excessive purity²² of breed. Nor do I think that much is to be inferred from the wearing away of the members of corporations. Aldermen and common councilmen are not precisely the stocks from which a large healthy progeny is to be expected. Nor do I believe that in the Fifteenth, Sixteenth, and Seventeenth Centuries, when the population of England advanced very slowly, it was better fed than it has been during the last fifty years, which have seen it more than double. I believe that it was much worse fed. It ate barley instead of wheat and salt fish instead of bacon. It is a strong proof of the rashness with which Mr. Doubleday has drawn general conclusions from a few remarkable facts, that the best fed and best paid portion of the English working classes—the manufacturing population—though neither their occupations nor their residences, nor their habits are healthy, yet increase the most rapidly.

I have dwelt at rather greater length than it may appear to deserve on Mr. Doubleday's theory, for two reasons. First, because it has attracted considerable attention; and secondly, because it *does* point out a preventive check to population—not of the importance which he assigns to it, but yet not to be disregarded. It is certain that the indolence, the food somewhat excessive when compared with their exercise, the late hours, the heated atmosphere and the habits of general self-indulgence in which women belonging to the opulent classes in Europe frequently live, are not favorable to fecundity. To this physical check I give the name of *luxury*, not using that word dyslogistically, as implying any blame or even disapprobation but merely as indicating the comfortable and not very active mode of life which women who can afford it naturally adopt, and which is unfavorable to robust health and to fecundity. I include also under the term *luxury* the desire of costly indulgencies, which induces many men, in every class, to avoid encumbering themselves with a family. And I believe these checks to be powerful enough to occasion the gradual extinction of any rich aristocracy which was not recruited from the less opulent classes.

To the preventive check to which Malthus gave the name of moral restraint when accompanied by chastity and of vice when not so accompanied I give, as I have already mentioned, the name of *prudence*. It may seem at first sight that the abstinence from marriage in order to enjoy costly indulgencies, which I have called *luxury*, is only a subdivision of *prudence*. It differs however from *prudence* in being solely self-regarding. When a man remains single because he fears that his income as a married man would not enable him to educate his children, he is *prudent*. When he is deterred from marriage by the fear that he must give up his opera box, his champagne,²³ or his hunters, I call him *luxurious*.* 186

3. Extrinsic Restrictions on Marriage. *Luxury* and *prudence* may be called the self-operating or intrinsic preventive checks. They derive their force from the physical, intellectual, or moral qualities of those whom they restrain, and are generally powerful in proportion to the mental and bodily cultivation and refinement of each individual.

There is another class of preventive checks which may be called *extrinsic*, which are imposed by the will of other parties, and affect individuals without requiring their coöperation. These are

the restrictions on population imposed by law,²⁴ or by the existence of private property in land.

In many parts of Europe the government endeavors to enforce prudence, or to provide a substitute for it when deficient, by regulations for the express purpose of preventing marriage in some cases and delaying it in others. The collection of foreign statistical facts made by the Poor Law Inquiry Commissioners [1832-1834] contains many of these regulations.

Throughout the Teutonic parts of Europe marriage on the part of persons in the actual receipt of relief, appears to be prohibited, and the marriage of those who are not likely to possess the means of independent support, is very seldom allowed. Thus we are told that in Norway no one can marry without "showing, to the satisfaction of the clergyman, that he is permanently settled in such a manner as to offer a fair prospect that he can maintain a family."

In Mecklenburg "marriages are delayed by conscription in the twenty-second year, and military service for six years; besides, the parties must have a dwelling, without which a clergyman is not permitted to marry them. The men marry at from twenty-five to thirty, the women not much earlier, as both must first gain by service enough to establish themselves."

In Saxony "a man may not marry before he is twenty-one years old, if liable to serve in the army."

In Dresden "professionals" (by which word artisans are probably meant) "may not marry till they become masters in their trade."

In Württemberg "no man is allowed to marry till his twenty-fifth year, on account of his military duties, unless permission be especially obtained or purchased; at that age he may obtain permission, which is granted on proving that he and his wife would have together sufficient to maintain a family, or to establish themselves—in large towns, say from 800 to 1,000 florins, (from £66 13s. 4d. to £84 3s. 4d.); in smaller, from 400 to 500 florins; in villages 200 florins (£16 13s. 4d.). They must not be persons of disorderly or dissolute lives, drunkards, or under suspicion of crime, and they must not have received any assistance from their parish within the last three years."

In Bavaria "no marriage between persons without capital is allowed without the previous permission of the poor institutions. Directors who do not follow these orders, nor pay attention to the Act of the 12th of July, 1808 (Government Papers, page 1506)

concerning marriages in the country, have to answer for the maintenance of the new families, should they not be able to maintain themselves. In the same manner, the priests and other churchmen are responsible for the support of such persons as they have married without leave from the authorities, besides other fines which are imposed on this breach of the rules of the marriage ceremony."

The preventive checks imposed by the existence of private property in land will be the subject of the [next chapter].* ¹⁸⁷

CHAPTER III

PRIVATE PROPERTY IN LAND AS A PREVENTIVE CHECK TO POPULATION

1. Relative Increase of Subsistence and Population among the Lower Classes. 2. The Vagrant Class as a Typical Illustration. 3. The Rôle of Landlords in the Scheme of Social Organization. 4. Effects of Inattention of Landlords in Ireland.

1. Relative Increase of Subsistence and Population among the Lower Classes. [In the last chapter I alluded to] the preventive checks which are opposed to population by the existence of private property in land. [*A priori* it might be shown] that under a natural system, by which no restraints are imposed on the alienation or on the management of land, the interest of the landlord will always prevent the utmost use being made of its productive powers—will always keep the production of food far within the limits to which it would be possible to extend it. [Similarly it might be pointed out theoretically] that under an opposite system, a system under which the land were tasked to its utmost by the constant application of fresh labor and abstinence, it would be overspread by a vast semi-barbarous population, always living in poverty and occasionally thinned by famine. [The latter system presupposes] a state of things which, though it can scarcely be reached in its extreme point, may yet be approached under the influence of ill directed legislation, or of a state of law or of public feeling destroying, or materially interfering with, the landlord's powers.

[The subject matter involved in these hypotheses I now propose to] consider *positively*; and for that purpose I shall endeavor to show what is the sort of population which naturally springs up when the powers of the landowner are not sufficient to enable him to regulate the number of the occupants of his estate.

The instinct which leads men to multiply their species seems to be strong in proportion as they approach the brute. Among the highest classes of a highly civilized community it is so weak that its nobility and even its gentry would, as I have already remarked, become extinct in a few centuries if they were not constantly recruited

from the lower orders. The middle classes ²⁵ keep up their numbers and, indeed, augment them as their means increase, but not in proportion to that increase. It is to them that we owe the advance of capital over population, which in peaceful times augments the relative as well as the positive wealth of every civilized community: which has gradually raised Europe from the poverty of the dark ages to comparative opulence, by making each generation more prosperous than that which preceded it.

But among the lowest orders of every densely peopled community there is a degraded stratum so low intellectually as to be almost without providence, and so low morally as to be almost without self-respect. It is with respect to this class, and to this class only, that Malthus's celebrated axiom that population has a tendency to increase beyond subsistence is true. In every other portion of society the tendency is just the reverse. If it were not so the condition of Europe, instead of being one of increasing wealth, would be one of increasing poverty. But when men are so indigent that they cannot become poorer, and so abject that they cannot be more degraded, they naturally seize whatever pleasures are within their reach without caring for the consequences, generally indeed without attempting to estimate them.

To this degraded class or rather to these degraded classes, for there are many species of them, the preventive checks which I have called intrinsic do not apply. Their increase can be preventively checked only by one of two influences: either by the action of the government or by the action of the landlord. If these are not applied their numbers must be kept down by the destructive or by the remedial check—by disease or by emigration. The latter is seldom within their reach. It requires skill, capital, and enterprise. It may be provided for them by landlords or by a government rich enough and wise enough to make the sacrifice. And it has been found that when it has been continued for some time on an extensive scale, those who have been sent out and have established themselves abroad are able and willing to send funds to assist the emigration of the friends whom they have left behind. More than one-half of the expense of the present emigration from Ireland is supposed to be thus defrayed.

But these are rare exceptions. I am not aware indeed of any government, except our own, or of any landlords, except those of Great Britain and Ireland, who have in modern times effected or even materially promoted an extensive emigration for the purpose

of reducing population. Arbitrary governments have sometimes removed large bodies of people from one part of their dominions to another—as Peter the Great did when he founded St. Petersburg, but this has been done not for the purpose of diminishing the population of the one place, but in order to increase that of the other. The stream of German emigration which is now setting towards the United States consists of persons who go out at their own cost; instead of the lowest they belong to the highest class of peasantry, and take out capital more than enough to have maintained them at home.

As a general rule, if any country has the misfortune to include among its inhabitants a class so low morally and intellectually as not to be restrained from excessive multiplication either by the intrinsic check of prudence, or by extrinsic checks applied by the state, or by the owners of the soil, that class will be kept within the limits of possible subsistence only by the diseases which a supply of the necessities of life deficient in quantity or in quality must produce.

Of these classes the pariahs of Hindostan, the *cagots* of France, the *Heimathlosen* of Switzerland, the professional beggars and a large portion of the cottiers of Ireland, and the vagrants of England are among the lowest subdivisions.

As a specimen of the class I will describe at some length the English vagrant.* 188

2. The Vagrant Class as a Typical Illustration. The vagrants who infest England may be divided into two great classes, the country and the London vagrants. An interesting set of reports on country vagrancy was published in 1848 by the Poor Law Commissioners. I extract from Mr. Boase's report a general view of the whole class.

In describing the class of persons commonly called vagrants, but in the Poor Law vocabulary designated "tramp," I give precedence to the sturdy English mendicant. Though not a constant occupant of the tramp ward in the workhouse he is frequently there, either having relied on that shelter when he has spent his last penny in dissipation, or to save the cost of his lodging, that he may have the more to spend in debauchery. The man of this class is easily recognized by his patched but warm and ample coat, with a number of pockets and many appliances for his personal comfort suggested by his long experience. He never visits a workhouse where labor is exacted (unless it may be on Saturday night, work not being done on the Sunday) but leaves early without work or breakfast; dry bread, or even gruel, not being to his taste when he can resort to the

wallet left well stocked with broken victuals in the custody of some friend in the village.

The class next, and more important from its numbers, is that of the young English vagabond, generally the native of a large town, probably an "idle apprentice," who, from crime or abandoned conduct, has made himself an outcast. Having no ties to bind him, he finds it most agreeable to travel about the country, being sure of a meal and a roof to shelter him at night. The men of this class are principally from seventeen to twenty-five years of age. They often travel in parties of two or three, having frequently a young woman or two, as abandoned as themselves, in company; begging, or extorting money during the day; but making no provision for the night or the morrow.

This is a very numerous, and, I fear, rapidly increasing class, and to them principally belong the defiers of authority, who break windows, and abuse the officers, refuse to work, and incite others to rebel. For these the gaol has no terrors; but is a desirable retreat from the winter cold, or as affording a sanitary asylum, where the best medical skill and the most proper diet for the cure of disease engendered by filth and immorality may be obtained.

These, as a class, are of the lowest moral character, not possessing the honor generally attributed to thieves, and not only robbing and cheating each other, but shamelessly claiming applause for it. Their habits are noisy, disturbing the fellow lodgers at night, by singing and shouting in chorus, and corrupting or disgusting all within hearing by the tales of crime, and boasts of debauchery in which they emulate each other.

Approaching these in character are the young countrymen who have absconded perhaps for some petty poaching offense, and to whom the facility of leading an idle vagabond life has proved too great a temptation. The tale of the profligate and the applause of the young aspirant have frequently been overheard in tramp wards. There are a few calling themselves agricultural laborers who are really such and who are to be readily distinguished. There are a few mechanics also, chiefly tailors, shoemakers and masons, who are occasionally destitute, but as much from improvidence and improper reliance upon workhouse relief as from any misfortune or necessity.²⁶

The best account of the London vagrant is to be found in the report of the Committee of the House of Commons on District Asylums, printed by the Lords 27th August, 1846.

I extract from the evidence of Mr. Miller, the relieving officer of the West London Union, the following description of what is perhaps the most common species of this large genus.

Many of the vagrant poor consist of refractory paupers belonging to various parishes of the metropolis; persons of bad character and of dis-

solute idle habits. We have generally in our workhouse from fifty to sixty of that class. They are persons who decidedly will not do anything to get their own living; they are constantly in the habit of leaving the workhouse and roving about, stopping out for three or four days or a week together, indulging in dissipation, and lodging at the different workhouses by night. This class of poor (and there is a large number of them in all the workhouses) never leave the workhouse for any honest purpose, but merely stray about several days till they are admitted again. They go in and out, many of them, twenty or thirty times in the year; they apply for their discharge, either to the master or to the committee, whenever there is a fair or any amusement going forward, or when the voluntary asylums in London are open. There are a large number of them, both male and female; they associate together when they are out, and return again. Sometimes they are out several weeks in hay making time, and during the hopping time; they go out by concert among themselves. A large number of the vagrants consist of that class of persons who, by having this provision of a breakfast and a lodging, are induced to leave the house temporarily, and come back again; and they remain in that way permanently chargeable to the parishes.²⁷

It is supposed that there are about 20,000 such persons now in London and its neighborhood who pass their nights in the workhouses, the prisons, and the nightly asylums which philanthropists have opened to attract them. By day they wander about the streets living on theft, on alms, and on the meals gratuitously supplied by the Mendicity Society and the charitable soup kitchens. When they are tired of wandering and exposure they destroy the bedding and break the windows of a workhouse in order to be committed for a few weeks to a prison, selecting that which offers the largest ration or the loosest discipline.

Such a life is unfavorable to the increase of population. It is free indeed from the preventive check of prudence, but is subject to the destructive checks of vice and misery, which, if these armies of outcasts were not recruited by those whom idleness, dishonesty or intemperance is perpetually thrusting out from the respectable classes, would very soon cause its extinction.* 189

3. The Rôle of Landlords in the Scheme of Social Organization. As long as beings morally and intellectually as low as the ordinary vagrants are driven to wander, or if stationary are stationary only in the workhouse or in the prison they are rather disgusting than formidable. Mendicancy is a political disorder which has been compared to the cutaneous eruptions, which are deformities rather than

diseases, which hurt the looks, but do not seriously injure the constitution of the sufferer.

But if the degraded class which is to be found in every old country, the class which cares for nothing but life and sensual enjoyment, which fears nothing but hunger and cold, and hopes for nothing but food and bodily excitement, is allowed the use of *land* they multiply on it like other brutes to the utmost extent to which they can extract subsistence from it. They defend themselves from the weather by hovels built of mud or of loose stones from the roads or the fields and roofed with sods; they scratch up enough ground to grow potatoes and get money to make their small purchases of clothes by doing odd jobs for their richer neighbors. The fecundity of their women is great and early; a life of hardship and exposure to the air is favorable to it, and it more than compensates for their low average longevity. I say *average* longevity, because a life of this kind is principally injurious to infant life. Out of a dozen children only four or five may struggle through, but they are the strongest: they are hardened by the exposure which has killed the others; and as only the strongest of their children survive, the race becomes gradually enduring to a degree of which in a happier state of society, there is no example. Among the rich weakly children are kept alive, and are kept alive to marry; to perpetuate weakly families and to carry hereditary disease into those which were free from it. An Irish cottier or a savage is one of the healthiest of nine or ten children whose parents were the healthiest of nine or ten others and so on perhaps to a remote ancestor. The unhealthy members who, in our communities are carefully preserved to be the sources of future unhealthiness, perish infants in Connaught and in Kamschatka.

To prevent such a state of things seems to me to be the purpose for which Providence has ordained the existence of landlords *¹⁹⁰—a class of persons whose interests it is that the land should produce as large as possible an amount of surplus produce, and for that purpose should be occupied by only the number of persons necessary to enable it to produce the largest possible amount beyond their own subsistence.*¹⁹¹ In this, as in many other cases, nature has provided that the interests of the landlord and of the public shall coincide. It is the interest of the landlord that his estate shall be occupied by precisely the number of persons which will produce the largest surplus above their own consumption; or, in other words, by the number of persons whose labor can be beneficially employed. The proportion, of course, varies according to the habits of the

people. A laboring population eating meat must be more thinly scattered than one eating corn; and a potato-fed community might be denser than one eating wheat. On the other hand, a skillful and laborious peasantry would be more productive, and therefore might be denser, than one idle or unskillful. A population thus proportioned to the demand for labor never can be in want of employment. If it be frugal it cannot, except from unforeseen misfortune, want public assistance. This is the state of things in the best parts of Scotland and England, in Switzerland, in Norway, in the eastern parts of Belgium, and in France. It is, indeed, the natural state of things in the absence of misdirected legislation, since it is the state of things to which the interests of all parties lead them.

[It is said, however, that] property has its duties as well as its rights; [and that] the great duty of the landlord [is] so to manage his estate, as to render it the seat of prosperous tenants, and moral, industrious, and well-paid laborers.* ¹⁹²

All these are important duties, but they are not necessarily the duties of a landlord; they may be performed by the magistrate or the clergyman; or they may be left unperformed, and society would still go on.

[In 1848] I spent a couple of months near Island Magee, on the Antrim coast [of Ireland]. It contains about 3,000 persons, occupying about 7,000 acres of land immediately under the receiver of the Court of Chancery, put in by an encumbrancer, who derives title from a middleman, who holds under Lord Donegal, so that they are four removes distant from their landlord. There is not a resident gentleman, or even a resident clergyman, within some miles of them; and yet a more prosperous or a more moral community I never saw. All their little farms were models of neatness. Of the 3,000 inhabitants, only eleven received relief. During two months it was my favorite ride, and I never saw a beggar or an idler. I was assured that no Island Magee-man had ever been convicted of an offense.

But the duty which I hold to be the specific duty of a landlord—the duty which cannot be neglected without ruin, and cannot be performed by any one else—had been diligently fulfilled, and to its fulfillment I attribute the welfare of Island Magee. That duty—the duty for the performance of which I believe that Providence created landlords—is *the keeping down population*.* ¹⁹³

Nowhere is this duty more vigilantly or more effectually performed, than where the ownership of the land is minutely subdivided.

The owner of twenty thousand acres, especially if they form separate and dispersed estates, knows little of what is going on in the greater part of them. While he is taking care that the number of tenants and laborers residing on the property under his own eye, shall not be greater than that which will give the largest proportional produce—that is to say, the largest fund to be divided between him and them—some outlying estate may be invaded by intruders, or subdivided by an unwatched tenantry, until it is covered by a horde of miserable, half-civilized, and therefore improvident beings, whom it seems cruel to remove, and it is certainly cruel to retain. The owner of twenty, or thirty, or fifty acres keeps watch over them himself. He allows no tenants or laborers to reside on them unless their presence be useful. There is no country in Europe in which population increases so slowly as in France, because there is none in which the ownership of land is so subdivided.

On the other hand, if this restraint be withdrawn—if the landlords lose the motive, or the power, to proportion the number of their tenants to the demand for their services^{* 194}—[the land] would be tenanted by all whom it could maintain, just as a warren is tenanted by all the rabbits that it can feed. Competition would force them to use the food that was most abundant—every failure of a crop would produce a famine; they would have no surplus produce, and therefore no division of labor; no manufactures, except the coarse clothing and furniture which each family must produce for itself; no separation of ranks, no literature—in short, no civilization.^{* 195} The instant any portion of Ireland is neglected by its owner, this is the state to which it tends. Bad as an exacting landlord is, a careless or overindulgent one is still worse.^{* 196}

When the enthusiasts of the Communist school say that the landlords are to be held responsible for the adoption of the measures required to make the land support its population, and that if they will not exert themselves to make the changes and improvements in the cultivation of their estates which are necessary to enable them to support the poor, they must submit to a gradual process of confiscation—they assume that the poor are a definite quantity, and the landlords' means an indefinite quantity. The real facts being, that the landlords' means are a definite quantity, and the poor an indefinite one; and that if landlords were to attempt to perform what is called their duty—were to attempt so to manage their estates as to provide for all who chose to occupy them, or to procreate other occupiers of them—in short, if they thought it their

duty to promote population instead of repressing it, all Ireland would soon become one Skibbereen.* ¹⁹⁷

4. Effects of Inattention of Landlords in Ireland. As specimens of the misery and vice into which the tenants of a neglected property may fall, I extract, out of many instances mentioned in the Appendix to Lord Devon's Report, the following description of the state of a part of Donegal:

A great many proprietors (says Mr. Otway, the Poor Law Commissioner for Donegal) requested I would not join their properties to Tanawilly. I found, on inquiry, that the property thus sought to be avoided consisted of lands belonging to the diocesan school of Raphoe. It was extremely subdivided, and the people were in a state of the most extreme poverty I ever witnessed; most of them were in a state of emaciation from want, and were confined to their beds from want of clothing.

Do you know from what the great poverty of those people has arisen? From the incompetency of the land to afford to so large a number the means of subsistence. I think if properly cultivated and held, the rent now nominally, payable in Tanawilly, would be very moderate. If I had time to manage it, and had it all to myself, and could put the tenants on their farms as I chose, and could make such arrangements as I chose, I would give the amount of the present rent roll for it; but, as it is now, it is worthless. The people cannot get food enough off it, let alone paying rent for it.²⁸

Another instance may be taken from Lord George Hill's account of the district of Guidore, barony of Kilmacrenan, county of Donegal, in 1838:

A wild mountainous district, divided into small properties. No resident proprietors. The estates of such small value, that no gentleman, or scarcely respectable person, would act as agent for them. No schools; no dispensary.

Rents very small; no regularity as to collecting them;—small sums taken at fairs, or wherever they could be got; no receipts given, and no regular account kept, consequently the greatest confusion prevailed as to what was due.

Upon some of the properties, there were arrears of eight, ten, and even twenty years' standing. Much illicit distillation carried on. Successful resistance to tithes; upon one occasion sixty police were beat off. A great deal of fighting at fairs. Much drunkenness.

Many never contemplate anything beyond potatoes sufficient to feed their families (the little corn grown being enough to meet the demands of the landlord, not amounting, in most cases to more than 10s. or £1 per annum); a cow or some goats, five or six half-starved sheep, to supply

the family with clothing, or furnish wool for making stockings for sale, to buy tobacco.

The total neglect of these mountain districts is in a great measure the reason of their present wild condition. The people, left entirely to themselves, to do as they pleased, divided and subdivided the land, without being interfered with by either landlord or agent, till the greater number considered that they might dispose of it as they pleased, provided they paid the landlord a just rent, and thought it hard that any one should interfere with their arrangements. The holdings were in many cases reduced to such small patches as to be incapable of producing sufficient food for the family, or scattered in so many bits, here and there, in eighteen or twenty different places. One man (a tailor by trade) had his land in forty-two different places, and gave it up in despair, declaring that it would take a very keen man to find it. One field, of half an acre of oats, near the police barracks, was held by twenty-two persons. The people were in the habit of trafficking in their land, and would sell their tenant right in small portions of it as they wanted money, either forever, or for a term of years. These bargains were of the most complicated nature; and, by the majority of the tenants, great dislike was manifested to the land being divided into farms, and to matters being put straight, and made easy of apprehension; many appearing to pass their whole time in concocting schemes for overreaching their neighbors, disliking plain dealings and matters of fact. The land is not let by the acre, but by the cow's graze, and even by the cow's foot (cosbo), the fourth of a cow's graze, varying in value, according to the quantity of the soil, from 1s. 8d. to 17s. 6d. There being little or no fencing after harvest, the sheep and cattle are brought from the mountains, and allowed to run everywhere, so that no man could venture to grow turnips, clover, or any kind of green crop. For want of a landlord's care, these already small farms were divided, at the death of the occupier, among his children, leaving to each a small skibbereen or small garden.²⁹

These are extreme cases; but I repeat, that this is the condition into which an Irish tenant population, uncontrolled by their landlord, has a tendency to fall.

In England the danger is much less. The cottage of the poorest laborer must be built for him. It must be the work of a mason and a carpenter. It cannot be finished for less than £30, and generally costs £50. A farmhouse for what we think a very small farm, that is, for one of forty or fifty acres, costs £200; and the outbuildings half as much more. Such an expenditure is beyond the means of the laborer or the farmer. It always, therefore, falls on the landlord. The buildings on his estate cannot multiply without his knowledge; in fact, they increase only by his direct interfer-

ence. Unless he will build for them, the number of families cannot be added to, except by the residence of more than one family under the same roof, a mode of life disagreeable to the English peasant.

In Ireland the cottier can build his own cabin. Loose stones or mud, which he collects himself, form the walls, a few sticks and sods the roof; a chimney he can do without; and drains he never thinks of. The cottage can be built for him for forty shillings. Even a man who calls himself a farmer, is often not much better lodged, and his outbuildings are hovels, even more wretched than his house.

This has made it possible for the Irish landlord to throw on his tenants the whole expense of building. And, unhappily for himself and for his tenantry, he almost always does so. I know some estates that are exceptions,—I know landlords who contribute towards the expense of the buildings on their land, and prevent the erection of any which they have not sanctioned. But, for this purpose, they must employ agents to look out for the first rise of an unauthorized hovel, and pull it down before it has been slept in. They are forced even to watch over the use which is made of the buildings which they have assisted in erecting. The landlord disapproves of the presence of the cow and the pigs in the cabin. He assists in building a cowhouse and a pigsty. If he leave the cottier to take his own course, in three months the cow and the pigs will be again in the cabin; and the new buildings will be tenanted by other men, women, and children, with perhaps cows and pigs of their own.

It is sometimes reckoned as an advantage belonging to the possession of property in Ireland that it affords a clear and certain income. In England, repairs, rebuildings, fences, drains, and the other deductions classed under the general name of "outgoings," often swallow up a half-year's rent. The greater part of what is called in England rent, is not rent in the technical sense of that word. It is not payment for the use of the original productive powers of the land. It is interest on the capital which the landlord, or those from whom he purchased or inherited, have expended, in fitting the land for the farmer's habitation and use. In Ireland the landlord's income is pure rent. He receives it merely for permitting his tenants to use his land. In most cases, it is only through their exertions that the land has been made productive of rent. They first inclosed their patches of cultivated

ground from the hillside or the waste, cleared the surface bog, cut the absolutely indispensable drains, and erected the absolutely indispensable places of shelter. They created their holdings without his aid, and do not require his aid to maintain them.

The necessary consequence is that his means of controlling them are few. They consist merely of distress and ejectment. He must use constant vigilance and occasional severity. One man divides his farm of ten acres, in order to sell the tenant right of half of it; another partitions it among his sons, or portions a daughter with an acre. The ejected tenantry from cleared estates crowd in as squatters, purchasing from the residents the tenant right of the site of a cabin and of a potato garden. A hovel is erected in a night, and in a few months, the inhabitants call it an improvement, and consider themselves tenants entitled to sell their tenant rights and to avenge ejectment by assassination. The misery inflicted by a clearance without doubt is dreadful; the injustice of ejecting, without compensation, a man who has made a real improvement, is revolting. But any law which should deprive the landlord of the power of arresting the subdivision of the land or even should materially weaken it—by enabling the ejected tenant to claim compensation as improvements, for cottages built without the landlord's consent, and injurious to the property—would undoubtedly produce a state of misery more extensive than that which now exists in Ireland, and less remediable.

And I must add, that there are at work feelings in England which lead one to fear that a very dangerous course of legislation would be popular. The English public seem to believe that it is the fault of an Irish landlord, that the tenants and cottiers on his estate are not as comfortable as the farmers and laborers of Yorkshire. They forget the capital of the Yorkshiremen. It is not so much the material capital—the money and live and dead stock of the tenant—as what may be called the intellectual and moral capital—the skill and industry and submission to law, both of farmers and of laborers—which produce the comfort of the unpauperized districts of England. Take away these elements of prosperity—cut up Yorkshire into holdings of from six to twelve acres, let its population, instead of being collected in towns, be spread over the country, deprive them of diligence and of skill, let neither property nor life be secure—and then see whether the landlord can make them comfortable. A few instances have occurred in which men of large means, and with great courage and

energy, by making it the business of their lives, have raised a Connaught or a Munster population, not indeed to the average English standard, but to a state which, when compared with that of their neighbors, was one of prosperity. But to produce this prosperity, and to maintain it, they must eject and consolidate.

This disgusts the English public. With a perverseness which, if it were not the result of ignorance, would be intolerable, and if it be the result of *willful* ignorance, is inexcusable—they execrate the landlord for his harshness if he be vigilant, and for the wretchedness of his tenants, if he be careless. They hold him responsible for the misery produced by habits the results of centuries of misgovernment—operating on a race not largely endowed with the qualities necessary to resist mischievous impressions. Unless the landlords³⁰ of Ireland had been already outlawed by the public opinion of England, no one would have seriously proposed to confiscate their estates.*¹⁹⁸

CHAPTER IV

THE DESTRUCTIVE CHECKS TO POPULATION: PRELIMINARY OBSERVATIONS

1. Average Longevity and Rate of Mortality. 2. Effects of Occupation and Environment on the Duration of Life.

1. Average Longevity and Rate of Mortality. [I now propose to] consider the destructive checks to population—those which operate by diminishing longevity, or, in other words, by accelerating mortality. Statistical writers have adopted different modes of comparing the average longevity of different aggregations of men. Sometimes the age which half the members of a given community attain, which has been called their expectancy of life, has been considered the test of longevity in that community. This however is obviously incorrect. If there are two communities in each of which half of the born attain fifty, and then die, but in the one those who die under fifty all die at forty-nine, and in the other at ten, the average longevity of the first community is far greater than that of the second, though the chance of reaching fifty be the same in both. Another test is to divide the whole number of the living by the deaths, and to consider the product [quotient] as representing the average longevity. The Ninth Report of the Registrar-General states the average annual mortality in England in 1846 to have been one in 43.55. And if we suppose the population of England to be stationary in every sense, that is to say, that none who have lived in England die elsewhere and that none who die in England have lived elsewhere, and that the number of births equals that of the deaths, and that the year 1846 was a year of average [normal] mortality, it certainly follows that the average duration of life in England is a small fraction above forty-three years and a half.

But if, of the 390,000 persons who died in England in 1846, 78,000, or one-fifth were foreigners who merely came to die, the real mortality of the English people instead of one in 43.55 was not one in 52. On the other hand, if we suppose that of the seventeen millions of people in England in the beginning of 1846, three

millions emigrated in the course of the year, the 390,000 deaths would really have to be divided among fourteen millions instead of seventeen millions, and would be about one in 36 instead of one in 43.5.

Now both these corrections must be made, though of course to a much smaller extent. A considerable portion of the deaths consisted of Irish who came infected with the fever of their country; there was a considerable emigration; and the year 1846 was not a year of average mortality. The deaths in the previous year were not one in 48. The deaths of the nine years from 1838 to 1846 were one in 46.

Of course the smaller the community the greater must be the necessary corrections. In Liverpool for instance the deaths in 1845 were 3,555. In 1846, in consequence without doubt of the Irish immigration, they were 9,767. On the other hand, the average mortality in Cardiganshire is I believe one in 70—not because the average duration of life there is seventy years, but because a large proportion of the Cardiganshire people emigrate and die elsewhere.

In fact when we have to deal with a very small community, the annual mortality ceases to be any index whatever of the average longevity. In two parishes one containing a large school, the other a large hospital, the average longevity of the permanent residents might be the same, while the healthiness of the school boys might diminish the mortality in the one to one in 60 and the state of the hospital raise that of the other to one in 30.

And lastly estimates of longevity founded on the proportion of deaths to persons living are affected by the increasing or decreasing state of the community. If in any community the deaths were one in 40 and all births were suddenly to cease, the mortality would the next year be one in 39, the next one in 38, and so on—the longevity remaining the same or increasing, if the community were one in which infant life had previously been short. On the other hand, if a community in which population had been stationary and the annual deaths one in 50 should suddenly increase by five per cent per annum—an event which might easily follow the sudden opening of some new field of production—the proportion of annual deaths to persons living would immediately diminish. Every year the number of persons would be increased and also the number of deaths; but the increase of deaths would be much less than that of persons, yet the longevity might remain unaltered.

A third test is to add together the number of years which all those who have died during the year have lived, and to divide it by the deaths. Thus if forty persons have died in the year, having lived altogether 1,600 years, this gives forty years of life to each. Mr. Chadwick thinks this the best test, but he has himself pointed out its imperfections.³¹

In the first place, like the others, it is deceitful unless a considerable period be taken. One season is peculiarly destructive of infant life, another of aged life. The addition of the years of life of the persons who died in the former year would indicate a short duration of life, that of those who died in the latter a long one.

In the second place, it is liable to be disturbed by immigration and emigration. If we take my example of two parishes one containing a large school the other a large hospital for aged persons, the average longevity of the indigenous population of each might be the same; but the parish containing the school would appear to have a very short duration of life, the parish containing the hospital a very long one. The average duration of life among the schoolboys who died might not be ten years and that of the inmates of the hospital seventy. We have seen that if the proportion of annual deaths to the whole population were taken as the test, the school parish would have an enormous advantage over the hospital parish. If the number of years lived by all who died were the test, the hospital parish would have an enormous advantage over the school parish. According to the latter test no place is so healthy as a workhouse, for the average age of those who die there, according to English experience is sixty years. According to the former test workhouses are eminently unhealthy. The mortality in that of St. Dennis when I visited it in 1832 was thirty-three per cent per annum. In some of the Irish workhouses during 1847 it was above five per cent per week, and in our own workhouses and in ordinary years it far exceeds the average of England.

A fourth test is to ascertain the proportions of deaths to individuals of each separate age. The Fifth Report of the Registrar-General, that for 1841 (printed in 1843) contains a list of the persons who died in that year with their respective ages. The census of that year shows the population of England and Wales on the 7th of June, 1841, amounting within a small fraction to sixteen millions. The following columns contain the number of persons

and the number of deaths in each quinquennial period omitting the fractions under 1,000.

[Age Interval]	Persons [Alive]	Deaths	
		[Number]	[Rate] (One in:)
Under 5.....	2,108,000	133,583	16
10.....	1,906,000	17,868	107
15.....	1,733,000	9,116	190
20.....	1,588,000	12,056	132
25.....	1,551,000	13,922	111
30.....	1,284,000	12,889	100
35.....	1,167,000	11,414	102
40.....	885,000	11,195	79
45.....	888,000	10,510	84
50.....	639,000	10,244	62
55.....	634,000	10,811	58
60.....	392,000	10,552	37
65.....	440,000	13,813	32
70.....	259,000	14,071	18
75.....	224,000	15,569	14
80.....	120,000	14,525	8
85.....	70,000	11,681	6
90.....	24,000	6,550	4
95.....	6,000	2,242	3
100.....	1,000	604	2
Above 100.....	294	110	2

Supposing these numbers to be correct, that the year 1841 was one of average mortality, and that a population so large as that of England is not much affected by emigration or immigration, we know the proportion of persons who die in England in each quinquennial period of age and, by inference, in each year of age.

From these premises Mr. Farr has constructed an English life table, that is to say, a table showing in what proportions 100,000 children supposed to be born on the 1st of January in any year will drop off year by year until the last survivor dies 105 years after his birth.³²

By this table³³ it appears that the first five years consume more than one-fourth of them, the number living being reduced at the end of the fifth year to 74,201. It takes however more than forty years to remove another fourth, the living at the end of the forty-fourth year being 50,300. Twenty-four years more remove another fourth, the number at the close of the sixty-ninth year being reduced to 24,531. Half of these die in the next nine years,

the number alive at the close of the seventy-eighth year being 12,146. Rather more than half of these die in the next five years, the number alive at the close of the eighty-third year being 5,881. Rather more than half of these die in the next four years, the number who live beyond the end of their eighty-seventh year being only 2,577. From this period until the end of the ninety-fifth year the deaths are about one-half in two years; and then till one hundred, about half every year, the sixteen who survive one hundred die in no regular progression.

The probability of future life at any age is inferred from the number of years which it takes to remove one-half of them. Thus, as the number at the age of twenty-nine is 60,941 and at sixty-six is 30,469, it follows that a person at twenty-nine has an even chance of living to be sixty-six—in other words, that his life is worth thirty-seven years; at seventy-six the number living is 15,120, so that a man of sixty-six has an even chance of living ten years longer.

We may infer therefore from this table that a child just born in England has an even chance of living to be forty-five; that at forty-five he has an even chance of reaching seventy; that at seventy he may expect nine years of life; at seventy-nine, five years; at eighty-four, four years; from eighty-eight to ninety-six, two years; from ninety-six to one hundred one year. After which age the probability of future life ceases to be estimable.

[In dealing with estimates of average longevity the student must, of course,] always bear in mind that they are only approximations and approach accuracy as the area of observation increases, both in the number of persons observed and the number of years during which they are observed, and as the population approaches to being stationary, as opposed to increase or diminution and to immigration and emigration.* 199

2. Effects of Occupation and Environment on the Duration of Life. [In a former chapter ³⁴] I described some of the most remarkable instances of [unsanitary conditions and overcrowding which have been found to prevail in our manufacturing towns]. It is unnecessary to recur to them, and I shall confine myself to a statement of some of their consequences. I shall take them from Mr. Chadwick's report to the Poor Law Commissioners on the sanitary condition of Great Britain, published in 1842.

Mr. Chadwick compares the average mortality of different classes in the same district, and of all classes in different districts. For the

first purpose he divides English society into three orders, to whom he gives the names of *gentry*, *tradesmen*, and *laborers*—a division corresponding with the usual one of the higher classes, the middle classes,³⁵ and the lower classes. The differentia which constitutes these classes is association. Those who will eat together and intermarry may be said to belong to the same class. At the top of the highest class is the peer, at the bottom the country surgeon or the country attorney. At the top of the tradesman class is the great London shopkeeper with a capital of £200,000 and an income of £20,000 a year. At the bottom is the village retailer whose income is probably less than that of an average laborer. At the top of the laboring class is the skilled artisan who earns three or four guineas a week, or the *chef de cuisine* who perhaps gets £200 or £300 a year; at the bottom is the pauper who lives on a parish allowance.

These classes differ from the castes of an Asiatic community chiefly in the delible character of the distinction. In England a man's rank depends on his occupation, his personal qualities, his wealth and his birth; and of these elements, the only unchangeable one, birth, is the least important. The lowest birth is no disqualification, and the highest is not a substitute for the others. In Asia caste is a matter of birth and, therefore, though it can be lost, cannot be acquired. No wealth or power will exalt a Sudra to a Brahman.

But differences of class while they exist, though not indelible, separate society almost as much in England as in Asia. A duke will dine with a country curate or marry a country curate's daughter, but the curate himself will not associate familiarly with a man who stands behind a counter. A few eminent booksellers have owed to their connection with literature an introduction into the society of the higher orders but they are rare exceptions. Similar feelings have put an end to the practice of the farmers receiving their laborers into their houses and partaking of their meals. Domestic intercourse between two classes is disagreeable to both parties.

It is to be observed that each of these great classes is subdivided and has a higher, a middle, and a lower class of its own. Thus the gentry are divided into the high aristocracy consisting of noble families, great proprietors, and men of powerful political influence who form what is called the "fashionable world"; the middle aristocracy consisting of eminent professional and literary men, members of the House of Commons, and persons holding important offices in the church and state; and the lowest aristocracy who are

gentry because they have the education and manners of gentlemen, and sufficient wealth to support them without any degrading occupation. But notwithstanding their internal subdivision each class has a character of its own, especially in the points with respect to which I am now considering them, their sanitary condition.

The gentry are comparatively temperate, cleanly, warmly clothed, take regular exercise, and attend to the ventilation and drainage of their dwellings. To all these subjects the tradesman, as a body, pay far less attention. They take little voluntary exercise, care little for personal cleanliness, less for fresh air, and still less for drainage and sewerage. The back shops and basements into which a respectable tradesman's family cram themselves in order to let their good apartments are abodes which a gentleman with perhaps one-half their income would not tolerate. As to the lower classes they seem in general either ignorant of the sources of disease or indifferent to them.

Under the slavery (says Mr. Chadwick) of the existing habits of laborers, it is found that the faculty of perceiving the advantage of a change is so obliterated as to render them incapable of using, or indifferent to the use of the means of improvement within their reach. The sense of smell, for instance, which generally gives certain warning of the presence of malaria or gases noxious to the health, appears often to be obliterated in the laborer by his employment. He appears to be insensible to anything but changes of temperature, and there is scarcely any stench, which is not endured to avoid slight cold.

It would have been a matter of sincere congratulation to have met with more extensive evidence of spontaneous improvement amongst the classes in receipt of high wages, but nearly all the beneficial changes found in progress throughout the country, are changes that have arisen from the efforts of persons of the superior classes. Inquiries have been made for plans of improved tenements, but none have been found which can be presented as improvements originating with the class intended to be accommodated. In the rural districts, the worst of the new cottages are those erected on the borders of commons by the laborers themselves. In the manufacturing districts, the tenements erected by building clubs and by speculating builders of the class of workmen are the least substantial and the most destitute of proper accommodation.* 200

[I shall now show] the results obtained by Mr. Chadwick as to the comparative mortality, in different places, of the three classes into which he distributes society. [For the sake of convenience these results may be summarized in tabular form, as follows:] * 201

CASES OF DEATHS, BY LOCALITY, OCCUPATION, AND AVERAGE AGE OF DECEASED

<i>Localities</i>	<i>Gentry</i>		<i>Tradesmen</i>		<i>Laborers</i>	
	<i>Number Observed</i>	<i>Average Age of Deceased</i>	<i>Number Observed</i>	<i>Average Age of Deceased</i>	<i>Number Observed</i>	<i>Average Age of Deceased</i>
London Unions:						
Kensington.....	331	44	348	29	1,248	26
Strand.....	86	43	221	33	674	24
Whitechapel.....	37	43	387	27	1,762	22
Bethnal Green...	101	45	273	26	1,258	16
Manchester.....	not stated	38	not stated	20	not stated	17
Boston.....	103	34	381	23	2,232	18
Liverpool.....	not stated	35	1,738	22	5,597	15
Leeds.....	79	35	824	27	3,395	19
Rural Districts:						
County of Wilts..	119	50	218 ³⁶	48	2,061	33
County of Rutland	not stated	52	not stated ³⁶	41	not stated	38

The following is [Mr. Chadwick's] statement³⁷ of the manner in which he arrived at his conclusions.

With a view of arriving (he says) at some estimate of the comparative operation of the chief causes of sickness and mortality among the different classes of society in the towns where the sanitary inquiries have been made, I have obtained the following returns from the superintending registrars. These returns have been corrected by local inquiry and are submitted as the best approximations that can readily be obtained. In all districts, and especially in the manufacturing districts, there is some migration of laborers which would, for perfect accuracy, have rendered necessary an examination of each case. This labor has been considered unnecessary. In the returns from single towns the deaths of persons of the first class are indeed so few that they must be affected by accidental disturbances, but when large numbers of the like class are taken the uniform operation of the like circumstances is shown in the like results. Had the mortality among workpeople of particular trades been taken instead of the mean chances of persons of all occupations deriving subsistence from weekly wages, classes with still lower chances would have been presented.* ²⁰²

[An analysis of the above table will show that in the four Metropolitan Unions] the average age which the higher classes reach differs but little; that there is some difference but not great in the ages at which the middle classes die, but that the age attained by the laborers in the Kensington Union which is comparatively thinly peopled exceeds that of the dense population of Bethnal Green by more

than fifty per cent; that between the gentry of Kensington and the laborers of Bethnal [Green] the difference is more than 250 per cent, and that in Bethnal Green itself the difference is still greater.

[It will be observed, on the other hand, that with respect to the counties specified in that table] the country population, in every class, lives longer than that of London. But London for a town is healthy [as compared] with Manchester, Boston, Leeds and Liverpool. It seems that the country laborer lives only two-thirds of the life of the country gentleman, but he lives longer than the gentleman in Boston, Liverpool, or Leeds; and more than one-third longer than the tradesman and more than twice as long as the laborer.

These however are average results. In early life the differences between the mortality in different classes and in different places is much greater; in middle life much less. We have seen that in all England the average mortality under five years old is one-fifth. But among the laborers in Manchester and Leeds it is one-half and in Liverpool two-thirds. For one child that dies under five years old in the rest of England ten die among the laboring families in Liverpool and five in Manchester and Leeds. But even among adults the differences are very great. A Rutlandshire country gentleman of thirty has probably twice as many years of life to exist as a Spital fields weaver.* ²⁰³

CHAPTER V

THE DESTRUCTIVE CHECKS TO POPULATION: DISEASE, WAR, AND FAMINE

1. Famine, War, and Disease as Destructive Agents. 2. Why Overpopulation and Unemployment Are Aggravated by War and Disease. 3. The Causes of the Irish Famine.

1. Famine, War, and Disease as Destructive Agents. The three great destructive checks [to population] are famine, war, and disease. Of these, famine is almost peculiar to barbarous and semi-barbarous countries. It is the misfortune of a people who live almost exclusively on one sort of food, the cheapest that can be procured. When that fails therefore—and such failures are periodical—a portion of them, large in proportion to the failure, must die of hunger. If the community be a small one, surrounded by other savage tribes, the survivors often became a prey to war. Their weakness invites attack and those who are not killed are dispersed as slaves among the conquerors. Among semibarbarous nations which are too powerful to fear this danger, famine is a temporary evil. It sweeps away a fourth or a fifth of the people, but the capital remains; the land less laboriously cultivated yields, though less positively, yet rather more in proportion to the labor bestowed on it; the reproductive power of population shows itself and in a few years all traces of the calamity are effaced.

War is a more extensively destructive agent than famine, for it destroys capital as well as people, and capital is of slow reproduction. It is the principal check to the increase of savages. In the savage state there is no machinery by which a central power can influence a numerous population or an extensive district. The inhabitants of a barbarous country are therefore divided into small communities.

Nationality, that is to say, the dislike of those to whom we are not bound by some strong common interest, is an instinctive feeling, and, like all malevolent instincts, prone to excess. It is felt strongly by the uneducated members of even a civilized community, and even against those from whom no injury has been received. A

common Englishman hates a foreigner³⁸ because he is a foreigner. Petty tribes have always real causes of variance. They have disputes about hunting grounds, wells, and, where they have advanced to the pastoral state, pastures and cattle. The term stranger is with them, as it was in the language of ancient Rome, synonymous with enemy. Active war therefore becomes their habitual state. Every resting place is a military post which every neighboring tribe wishes to attack. And their wars are wars of extermination. They cannot end by treaty, for savages never feel bound by a treaty, and therefore do not expect one to be observed by others. They cannot terminate by the subjugation of the beaten tribe, for there are no means of retaining it in subjugation. From time to time a whole tribe is destroyed by one blow; but, in general, the contest goes on from generation to generation, each party occasioning and suffering all the misery and loss which cunning and malignity ill supported by active courage, can enable two feeble enemies to inflict on one another.

War so conducted is, as I said before, the most effectual of all the destructive checks. The New Zealand islands somewhat exceed the British islands in extent, and excel them far in climate and soil. They could support well thirty millions of people. They do not support 150,000. The middle island which is about as large as England is wandered over by less than 1,000 families.

When a degree of civilization has been attained which enables large bodies of men to become the subjects of one government, war ceases to operate as a permanent and direct check on their increase.³⁹ It continues, as I have already remarked, to be a powerful indirect check, by interfering with the creation of capital; and a district which is the actual seat of war may be depopulated; but such events are occasional calamities, like earthquakes or inundations. The *vis medicatrix* of the political body is even stronger than that of the human body. It exercises its reproductive influence on both capital and population, and we often find semibarbarous nations during centuries of almost constant war retaining or even increasing their numbers. The tribes which occupied Italy and Greece before those countries became parts of the Roman Empire were always at war. They do not appear however to have become less numerous. Sparta, indeed, is said to have perished for want of citizens; but this depopulation did not arise from war, for the Spartan territory was singularly exempt from invasion. It was the boast of Epaminondas that he was the first who showed to the Spartan women the fires of a

hostile camp. Many parts of the Morea and of southern and central Italy, are now waste, which before the Christian era were occupied by large and flourishing communities. The preventive check of misgovernment has been more effective than the destructive one of war.

Civilized communities never endure famine, and in the present state of manners seldom suffer much from the direct effects of war. An invasion is a very different thing from what it was even two hundred years ago. As a preventive check, indeed, war was never so powerful as it is now. It never diverted from reproduction so large a proportion of the capital and labor of Europe. What we call peace is more expensive⁴⁰ than war was in the seventeenth century. But as a destructive check it has lost its importance.⁴¹ Even the most mischievous of all wars, civil war, is comparatively undestructive. The civil war under which Switzerland suffered in 1847 was waged on a scale which great empires were scarcely equal to in the seventeenth century. The Federal army amounted to 100,000 men—but it did not cost more than a few thousand lives: probably not more than the influenza killed that winter in London. The civil wars of 1848 have probably arrested the improvement of Italy, Sicily, and Germany—perhaps have thrown those countries back—but it has not been by the direct destruction of life. The difference between a healthy season and an unhealthy one represents a greater additional mortality than a year of even civil war, as war is now carried on.

There remains therefore *disease*, and a prevalence of disease to an extent occasioning a very low average longevity is not only possible but even frequent in a generally high state of civilization.

The great sources of disease⁴² seem to be the things which having once formed part of organized bodies, are in a state of decomposition, that is to say, are separating into their original elements. The carbon exhaled from the human lungs when concentrated is an instantaneous poison. So are the effluviæ from the *egesta* of all animal bodies. So are the gases in which organized bodies themselves, whether animal or vegetable, fly off in decomposition.

The great preservatives against these sources of evil are ventilation and sewerage. In a thin population where land is abundant, both of these are comparatively easy. A cottage may be built with windows on all its sides, and where land is abundant the value of the portion of it which a single family requires for building purposes is so small that mere want of ground never need occasion

overcrowded habitations. Thinly peopled countries, too, generally abound in timber, the cheapest building material. If the inhabitants of such countries, therefore, suffer from want of ventilation, it is generally because they are indifferent to it. And they are nearly independent of sewerage. It is easy to carry all the refuse of the house to a sufficient distance there to remain until it can be plowed into the fields as a productive instrument instead of a nuisance. Again, where land is abundant agriculture, including under that word the breeding domestic animals, is usually the most profitable industry. Capitalists and laborers can employ themselves more profitably in raising raw produce than in working it up. And agriculture is far the most healthy of human occupations.

But as population advances, as land becomes scarce, as rent rises, manufacturing industry becomes more profitable than agriculture. It brings with it the division and combination of labor and the use of complicated machinery. A single steam engine can provide the power which it requires two thousand workpeople to direct. They must all work, therefore, in the immediate neighborhood of that steam engine. And they strive always to live in its neighborhood to avoid loss of time and strength in going to and from their place of work.

These necessities have given rise to the populous villages consisting of rows of laborers' cottages, teeming with children, which cover the more rural parts of our coal districts. Sewerage now becomes necessary. The cottager is no longer surrounded by fields to which the refuse of his house may be usefully carried. Nor has he time to carry it. Ventilation too becomes more difficult. When several houses are to be built it is cheapest to build them contiguously. They can have openings therefore only in the front and rear. It is cheaper still to build them back to back, and in that case they can have openings only in front. In time the village swells into a town. Land becomes more and more valuable, tall houses are substituted for cottages. A well-paid workman who chooses that his family shall be well lodged occupies two or perhaps three rooms on a flat. A family poorer, or more careless of comfort, takes a single room or perhaps a single cellar, or perhaps a corner of a room or of a cellar. The evidence which has been collected [since 1840] as to the state of our manufacturing towns shows a degree of crowding, imperfect ventilation, and defective sewerage which might have been supposed to be incompatible

with life.* ²⁰⁴ [Some of the results of these sources of disease have already been pointed out in the last chapter.]

2. Why Overpopulation and Unemployment Are Aggravated by War and Disease. We frequently hear war and disease described by smatterers in political economy as beneficial inflictions for the purpose of checking overpopulation. This is an enormous error. The great mischief of war and pestilence is, that they aggravate overpopulation, that they increase the disproportion between the inhabitants of a country and the fund for their maintenance in comfort. Neither the invader nor the plague selects for victims the aged or the infirm, and leaves untouched the able-bodied adults and healthy children. War strikes down the vigorous young man, disease the father of a family who must follow his business wherever it leads him, among deleterious miasmata and atmospheric inclemency. The destruction of those who produced more than they consumed leaves those who were dependent on them a new charge on the survivors.

The unhealthiness of 1847 filled the workhouses of Ireland with fever orphans, the pestilence of this summer [1849] filled ours with cholera orphans. Even a general diminution of longevity, affecting equally every class and every age, if it checked in any respect the increase of the number of people, would do so chiefly by checking its powers of producing the fund by which it is maintained. A population in which the average age of death is twenty-five probably contains only half the number of adults who would be found in an equally numerous society in which the average age of death were fifty. It does not indeed follow that it could do only half as much work, since there are some trades in which the labor of a child is as efficient as that of a man, and there are few in which a child of ten years old is not of some use. The number of trades, however, in which the labor of a child equals in effectiveness that of an adult are so few that the number of applicants for such employment far exceeds the demand; and the result is not to raise the wages of the child to the level of those of the man, but to suit those of the man according to the childish scale. ⁴³

Again a short-lived population is a sickly one. It is short-lived, indeed, because it is sickly. And ill-health of course diminishes the quantity of labor that a given number of persons supply and impairs its quality. *Cæteris paribus*, the longer the members of any society live, and the slower their rate of increase the greater in proportion to their numbers will be their laboring power.

Other circumstances however may compensate for the absence of these advantages. Remarkable fertility of soil, convenience of situation, abundance of capital, great division of labor and its consequence, great skill, may enable a short-lived, unhealthy community to be very productive; and it is in general for the purpose of obtaining these advantages that men inhabit unhealthy districts and work at unhealthy trades. The consequence is that general unwholesomeness either of place or of employment appears to influence little the amount or even the increase of population. Though it diminishes longevity it augments fecundity by accelerating the period of reproduction. The early deaths of infants shorten the period of lactation, the premature deaths of parents make room for the earlier establishment and marriage of their children. Man becomes a more short-lived but not necessarily a less abundant animal.

This accounts for a circumstance which has often been remarked as a paradox that poverty, when it does not amount to destitution, though unfavorable to health is not unfavorable to population. The multiplication of the very poor is not checked by prudence. They press on to take the places of their predecessors, little caring how short may be the time for which they are likely to occupy them. There are less production and consumption than there would be among a longer-lived people but not necessarily fewer numbers.* 205

3. The Causes of the Irish Famine. [I have already remarked ⁴⁴ that] the destructive check which, in the absence of the preventive and remedial checks, keeps down population is want—the actual deficiency of food. To see this check in full operation we must go beyond the pale of civilization. We must see the state to which a people barbarous enough to depend exclusively on a single species of food, and that the cheapest, is reduced by the failure of its solitary crop. We must look at Ireland after a failure of the potato.

From the extensive library of bluebooks to which the Irish famine gave birth I will extract Captain Kennedy's report dated the 25th November, 1847, of the state of the Kilrush Union in the county of Clare.

The north and west of the Union, including the divisions of Kilmurry, Kilmacduane, Killard, Kilkee, and a part of Moyarta, are in a most lamentable state. The parts on the coast are most densely populated, with a turf-digging, seaweed-gathering, fish-catching, amphibious pop-

ulation—as bad fishermen as they are agriculturists. They have no regular mode of gaining a livelihood. They are inert, improvident, and utterly without foresight. Lavish and constant expenditure may keep them from starvation; but it will require years of good management and well-devised measures to make them independent or self-supporting. A few acres of reclaimed bog planted with potatoes has heretofore supplied their wants, and rendered them content on the lowest possible scale of existence. While westerly gales prevail during the winter, large numbers eke out a wretched existence by gathering seaweed, which they carry and sell further inland for manure.

The villages of Mullagh, Doonbeg, Bealaha, and Kilkee, are wretched nests of filth, famine, and disease; Carrigaholt and Burrin no better; Kilmekil division is also very miserable, without a single resident who has sufficient means to expend £5 in employment.

The district seems swept of food. The small farmers are realizing their produce, which they are afraid to keep. I believe one-third of the population will be utterly without food at Christmas, two-thirds starving before February, and the whole devoid of food or money before May.

Intimidation paralyzes all from high to low. Many of the habitations are no better than a fox-earth, and the inmates, in their appearance, clothing, and mode of living, hardly human. I need not detail miseries that I have seen and taken steps to relieve. This class are comparatively content and uncomplaining. Their mode of scratching the land does not deserve the name of cultivation. Their attempts are inferior to what I have seen among North-American Indians. This division (Moy-arta) contains upwards of 10,000 inhabitants upon 13,000 acres, and the net annual value under £5,000. Without potatoes it is a permanent pauper colony; the swarms of children incredible.⁴⁵

When a people has fallen into such a state as this it does not seem to possess any intrinsic means of recovery. A famine may thin their numbers, but it generally occasions them to waste their agricultural capital—to eat their seed and their cattle. The survivors are broken in spirit and in strength, and a period follows of diminished population but still more diminished resources. The land however remains, and, in proportion to their numbers they have more of it than before. This enables them gradually to replace their lost capital, but as their habits are unchanged, or, if changed, changed for the worse, sunk lower in degradation and improvidence, they continue their process of multiplication and in a few years are just as numerous and just as poor as before.

This has been the history of the West of Ireland for centuries. Neither civil war, nor scarcity, nor fever—the intervals between

them have seldom been long—has materially checked the growth of its population. The introduction of the potato [towards the end of the sixteenth century], the opening to them of the English market, the monopoly of that market given to them by the [Napoleonic] war, did not raise their standard of comfort. Evil fortune and good fortune have been alike inoperative. Every gap that has been made by famine or pestilence, every source of new production that has been opened, has been immediately followed by a proportionate increase of population exceeding the means of comfortable subsistence, in a degree which is destructive not merely to the happiness, but to the morality of the inhabitants.

No country can be tranquil or industrious, in which the proportion of people to the land and capital which employ and support them is so excessive as to leave them unemployed and destitute, or even unemployed without being destitute, during a considerable portion of every year. This is well illustrated in the excellent evidence given by Mr. Aubrey de Vere, before the Committee of the House of Lords, on Colonization, on the 19th July, 1847. (P. 513, and *post.*) It explains Captain Kennedy's remark that intimidation paralyzes all from high to low.

It must be remembered (says Mr. de Vere) that the immediate effect of over-population, when excessive, is to interfere with the ordinary relations of a society, and still more with the processes of agriculture, in such a manner as to make it almost impossible that money can be laid out productively. The farmer builds his sheds for his cattle; in the spring he has one or two calves; four or five armed men come up to him, and make him swear that he will kill his calves because his poorer neighbors require the milk. The effect of such outrages on improved cultivation is obvious.

4729. Have not there been many instances during the present year in which a species of tariff has been established by the disturbers of the peace, under which a large farmer is allowed to rear not exceeding two calves, another is allowed to rear one, and a third is prohibited from rearing any?—Yes; that is perhaps a more dangerous symptom than those occasional outbreaks of lawlessness which occur at other times. It illustrates the tendency of a very great amount of over-population to abolish the very idea of property,—making the people believe that the produce of the land belongs virtually to all on the land, and that they have a right to legislate as they think best as to the mode of its distribution.

4731. Do the same interferences take place with respect to the sale and price of potatoes?—Yes. A farmer receives notice that his po-

tatoes are required to be sold at such a price, or that he must be prepared to undergo whatever penalty the people choose to inflict upon him. This has frequently occurred.

Then supposing the laborer to be perfectly desirous to give honest labor in return for the wages he receives, he is almost as unable to do this, as the farmer is unable to cultivate the crops which he prefers. He is one of a certain number of people, all of whom require employment. If the employment is only sufficient for fifty men, and a hundred require employment, the remaining fifty will of course induce or compel the fifty who have received the employment to give such inefficient work as to render the employment of the hundred men necessary. If the hundred men should be all employed, but if the work be calculated to last only for six months, whereas the hundred laborers require subsistence for the whole year, they will naturally make the work last for the year; and any particular individual amongst them who wishes to make himself what is called better than his neighbor, is a man very injurious, as they think, to the community, and gets a hint to that effect. All the relations of society are thus embittered and the impatience of the disease resists the measures necessary for the cure. Every part is sore, and shrinks from the touch; every part is armed, and stings the hand that would heal it.

The failure of the recent attempt to support the people of Ireland by means of work on the public roads, is but an illustration on a large scale of a difficulty which besets all attempts to give employment where the pressure of population is such as to paralyze that employment which a less excessive pressure would have stimulated. The labor required was met by a combination. That is a fact that speaks for itself, everybody knows it; no person ought to have been surprised at seeing it occur. Those who were well acquainted with Ireland knew that the circumstance was certain to occur; because the same principle of combination has long prevailed amongst our laborers, although in an occult shape, and has, in an indirect manner, produced the same results; that is to say, by a kind of understood convention amongst the laborers, work has been done badly, and done slowly. While in England you have paid 1s. 6d. for labor, and have got 1s. 6d. worth of work, in Ireland we have paid 8d. for labor, and got 6d. of work; combination supplanting competition, and making labor expensive where the laborers were numerous.

4743. Does this pressure of a population in excess act dangerously upon the peace of the country?—It renders it impossible to maintain the peace in many of those districts in which the pressure is very much felt; because it reduces us to a state in which you may say that every one is in every one else's way. In England every one is socially dependent upon his neighbor; the intertexture of society is so finely wrought

that every man is the better for his neighbor, and so far has a sort of vested interest in his life; but in Ireland the people are competitors and rivals, and angry feelings are thus necessarily engendered. For this reason it has been found hitherto very difficult to preserve the peace in Ireland, even in times of comparative abundance. We have now met with a calamity which has very much the same effect as if some two millions of people had been added in one year to our population, a proportionate amount of food having been withdrawn. Under these circumstances the insecurity of property and the difficulty of maintaining the peace must proportionately increase.

4759. With respect to the general interests of your electoral division, how do you find that the state of the neighboring less improved electoral divisions acts upon you?—Very injuriously. That is one of our great difficulties. In a neighboring electoral division, a large proportion of the holdings consist of about three acres each. If each of those farms supports the person who possesses it, even supposing that no rent is paid, it is probably the very most that we can expect.

There are a very considerable number of acres in that electoral division which have remained altogether unsown and waste. Adjoining us is the electoral division of Kildimo; in it no considerable proprietor resides, and there is no chance of employment on a large scale. Supposing that in the two adjoining electoral divisions the people are destitute, we shall be in the difficult position of supporting our own people in the midst of a starving multitude on each side of us; and the question is, whether that multitude will be content to starve and see their neighbors provided for. As soon as we set 200 men at work, 200 more men will probably march down with their spades on their shoulders, and demand a share in that work.

Happily for Ireland the Union has not yet been repealed. Had her connection with England never existed, had she been always an independent country it is probable that she would not have fallen into her present calamities, but if she had fallen into them I do not see how she could have emerged from them. Now ⁴⁶ it is possible that the strong arm of England may pull her through. To effect this the first process must be to free her from the superfluous population by which she is overlaid. This however is a tremendous undertaking.

The degree in which Ireland is overpopulous may, perhaps, be best understood by comparing her to England.

Unfortunately the agricultural statistics of England are very defective. I am not acquainted with any estimate later than that furnished by Mr. Couling to the Emigration Committee in 1827,

and published (p. 361) in the appendix to the Third Report, ordered to be printed on June 29, 1827. It has been adopted, however, by Mr. Porter, and with a slight variation, by Mr. McCulloch, and so far as it differs from the truth, must obviously err in leading us to underestimate the *present* amount of agricultural improvement.

According to the estimate, the 32,342,400 acres of England comprised 25,532,000 in cultivation, of which 10,252,600 were arable and garden, and 15,379,400 meadows and pastures. The number of agricultural families appears, by the census of 1831, to have been then 761,348.

The surface of Ireland, according to the census of 1841 (p. 453), contains 20,808,271 statute acres, of which only 13,464,300 were then cultivated. Of these, in 1847, only 5,238,575 were under crops, thus subdivided: cerealia, 3,313,579; green crops, 727,738; flax, 58,312; and hay, 1,138,946.⁴⁷ The agricultural families were returned by that census as 974,188. So that more than one-fourth more families were employed in cultivating about half the extent of cultivated land.

The disproportion is still more striking when we look at the details. The arable and garden ground in England, consisted as we have seen, of 10,252,000 acres. In Ireland, in 1847, only 5,238,575 acres were under crops, of which 1,138,946 produced hay, so that only 4,099,629 remain for arable and green crops, or less than four and a half acres to an agricultural family. In England, the proportion of arable and garden ground is rather more than thirteen and a half acres to a family—just three times as much. Of course, when we come to the distressed provinces, the disproportion increases. In Leinster and Ulster the agricultural families were 483,845; in Munster and Connaught they were 492,343. The cultivated land in Leinster and Ulster was 7,368,727 acres; in Munster and Connaught, 6,095,573. The land under crop in Leinster and Ulster was 3,284,259; or, deducting 714,488 of meadow and clover, 2,469,771 acres. That in Munster and Connaught was 1,950,316 acres, or, deducting meadow and clover, 1,526,658 acres—not three acres and a rood to an agricultural family, or more than four times as many agricultural families to a hundred acres under crop as in England.

Now, in 1831, the agricultural population of England, in proportion to the land under cultivation, and to the capital employed on it, was in excess. It was the time when agricultural laborers were driven from farm to farm as roundsmen, were sold by auction

at 2*d.* per head per day, were harnessed on the roads to gravel carts, were sent ten miles to carry a barley-straw and bring back a wheat-straw, were imprisoned in the gravel-pit, or kept standing morning after morning in the parish pound. It was the time when farmers could not safely use machinery, when labor rates were sanctioned by law, when Wilmot Horton lectured on redundant population, and emigration was as vehemently demanded for England as it now is for Ireland. What then is to be done with an agricultural population more than four times as excessive in proportion to the demand for its labor, as one which itself was excessive? How are we to remedy a disproportion between cultivators and cultivated land, the greatest that has ever pervaded a civilized country?

There is only one remedy—it is that which I have termed the *remedial* check to population. It is emigration—a subject which I shall consider in the next [chapter]. * ²⁰⁶

CHAPTER VI

THE REMEDIAL CHECKS TO POPULATION: SPONTANEOUS EMIGRATION

1. *The Chief Factor in the Prosperity of New England: the Westward March of Population in America.* 2. *The Influx of European Immigration into the United States.* 3. *Tonnage Requirements and Financial Aspects of Emigration.* 4. *Effect of Large-Scale Emigration on National Wealth.*

1. The Chief Factor in the Prosperity of New England: the Westward March of Population in America. It is generally admitted that the inhabitants of the seaboard of the United States are the most flourishing community in the world. The English and the Dutch are the richest nations in Europe. They are the nations in which the wages of labor are the highest, in which the mass of the people are the best fed, the best clothed, and the best lodged. But the wages, the dwellings, the food, and the clothing of the New Englander are as superior to those of either the English or the Dutch as the latter are to those of Europe in general. We are proud—and with justice—of our middle classes. The middle classes of England bear a much larger proportion to the lower classes than those of any part of the Continent, except Holland. But in New England almost everybody seems to belong to the middle classes. With us the possession of property is the exception, in New England it is the rule. Both in England and in Holland about one-ninth of the population receive public relief; in New England not one-hundredth.

New England does not owe this superiority to her climate or to her soil. They are slightly inferior to the climate and soil of England. She does not owe it to her government. It is good but where it differs from its model, that of England, is I think on the whole inferior. She has a decided advantage over us in her lightness of taxation. Being safe from foreign aggression and not pressed down by a parasitic growth of colonies,⁴⁸ she almost escapes the great military and naval expenses which waste the resources of the maritime powers of Europe. But this advantage is not quite so great

as it appears to be. Her tariff is more oppressive than ours, and her church is defrayed by the people instead of being maintained by the appropriation of a portion of the profits derived from land. The only remaining difference between the two countries is their comparative density of population. In England the average population to the square mile is above 300. In New England, at the census [of 1840] it was under fifty-one; the highest, that of Massachusetts, being eighty-six.

One of the most important elements in production, land, is afforded to the New Englander six times as abundantly as to the Englishman. Of course this advantage might be counterbalanced by inferiority of soil or of industry and skill. The density of population in Wales is about one-third of that of England. Yet Wales is far poorer than England. But the soil of New England, though on the whole inferior to that of England is not materially so, and the Yankees equal the English in industry and skill. They have turned to the best advantage their extensive territory, and the result is an amount and a diffusion of wealth unknown in more densely peopled countries.

But how has this rarity of population been preserved? The average period of doubling in the United States is twenty-five years. In 1790 the population of New England was 1,001,823 persons. In 1840 it ought to have exceeded four millions. It amounted to only 2,234,822. The population of Connecticut in 1790 was 238,141. In 1840 it ought to have exceeded 950,000. It amounted to only 309,978. Its decennial increase [as compared with that of England was as follows]:

<i>Connecticut</i>		<i>England</i>	
<i>Census Year</i>	<i>Per Cent of Increase</i>	<i>Census Year</i>	<i>Per Cent of Increase</i>
1810	4.3	1811	14.5
1820	5.0	1821	17.5
1830	8.0	1831	16.0
1840	4.1	1841	14.5

The increase in Connecticut with a population of only 60.8 to a square mile was not one-fourth of that of England with a population of 300 to a square mile. According to Malthus's theory the preventive or the positive checks must have operated with peculiar force. Moral restraint, or vice, or misery must have prevailed in Connecticut during the whole of the last fifty years to a degree un-

known in England. Now of misery there has been none, of vice less than perhaps in any portion of the world. If there be a society distinguished above all others for sexual morality it is the Puritan blood of New England. There remains moral restraint. But the proportion of marriages to the population, and of children to a marriage, is not smaller but considerably greater in Connecticut than in England. With all our vice, all our want, and all our prudence we increase four times as rapidly as a people who are almost free from both the preventive and the positive checks.

There remains only the check which Mr. Malthus has disregarded, and which I have called the remedial check, emigration.

It is a great mistake (said M. de Tocqueville in 1835) to suppose that the deserts of America are peopled by emigrants from Europe. The European arrives without friends and without resources. To live he must find a master, and he seldom passes the line of servile and mechanical employment which coasts the Atlantic. The subduer of the wilderness must have capital or credit; the dweller in the woods must have a constitution inured to the rigors and vicissitudes of an American climate. It is the American who is spreading himself over these vast continents and leaving his own territory to that part of its population which can afford to be stationary or is unwilling to migrate. Notwithstanding the law of equal partition it is seldom that a New England property is divided.⁴⁹ The eldest son keeps the land, the others go with the personal property into the West. In 1830 out of the 288 members of Congress 36 were born in the little state of Connecticut. The people of Connecticut, who make only one forty-third part of the population of the Union supplied one-eighth of its governing body. Their own representation is only five, the remaining thirty-one sat for the states of the West. Had they remained in Connecticut they would probably have been laborers instead of proprietors, excluded from political life or taking part in it only as petty agitators. The European emigrant finds himself in a half-filled country in which capitalists are searching for laborers. He becomes a well-paid artisan. His son seeks his fortune in an empty country. He becomes a rich proprietor. The first saves a little capital which the second employs. Both the stranger and the native are prosperous.

It is difficult (continues de Tocqueville)⁵⁰ to describe the violence with which the American throws himself on the vast prey which fortune lays at his feet. He braves the arrow of the Indian and the ague of the swamp. He is not depressed by the silence of the forests by day, or alarmed by the cries of their inhabitants by night. A passion fiercer than the love of life drives him on. An unlimited continent is before

him. Yet he is as eager to enter it as if he thought that tomorrow there would be no room for him. I have talked of the emigration from the old states. How shall I describe that which pours from the new ones? It is not fifty years since the settlement of Ohio began. The greater part of its inhabitants were born elsewhere: its capital is not thirty years old and much more than half its territory is untouched. Yet already its population is on its march further west. Those who are planting Illinois come principally from Ohio. These men quitted their first country in order to be well off, they quitted their second in order to be better off. They find prosperity everywhere, content nowhere. Their restless passion for wealth is stimulated by success. Emigration is their game and its hazards are as attractive as its prizes. They press on so rapidly that the wilderness reappears behind them. The forest has only bent under their steps, it rises again after they have passed. Frequently in the midst of the woods of the West the traveler finds abandoned habitations. The remains of a log house, of a garden and of a fence show the vigor and the inconstancy of their founder. The forest closes up over these ruins of a day, and nature seems in haste to obliterate the ephemeral traces of man.* ²⁰⁷

2. The Influx of European Immigration into the United States. It is to be observed that while this process of depletion has been taking place on the western frontier of New England an opposite agency has been at work on its seaboard. During the whole of the last fifty years an emigration from Europe to the United States has been going on, of which New England has had, not perhaps its full share, but still a considerable portion. And as M. de Tocqueville has remarked, the European emigrants seldom advance far beyond the coast. The bulk of them are mere day laborers, and the Catholic portion which is large, must be near a priest and a chapel. It is probable that the European emigrants were sufficient to supply the slight decennial increase which Connecticut exhibits. According to the census of 1840 one-third of the population of Boston were foreigners.⁵¹

It appears therefore that Adam Smith's remark that of all luggage man is the most difficult of removal has ceased to be true; and that under circumstances in some respects unfavorable to the experiment, it is possible by emigration alone, without the aid of any preventive or destructive checks to keep down to a low level in proportion to their territory the population of a considerable nation.

This is a fact to which recent events in our domestic policy and in our domestic fortunes give enormous importance. Until very lately

the European emigrations which have peopled America and are peopling Australasia afforded no relief to the countries from which they swarmed. The emigrants generally went out as colonists, that is to say for the purpose of establishing themselves on vacant territory. For this end it was necessary that they should take with them considerable capital in clothes, tools, and live stock and also that they should either carry with them subsistence for a year or two, until they could make the land their tributary, or be supplied during that time from home. The House of Commons Committee on Emigration, in 1826, estimated this expense at £80 for a family of four persons; though in the experiment which was tried—the emigration to Canada under the superintendence of Mr. Robinson—the expense amounted to £22 2s. 6d. per head. Emigration in terms so costly as these could not be defrayed to any great extent either by private beneficence or at the cost of the public. And notwithstanding the attention excited by that report, the emigration for the five years ending in 1828, the first as to which we have official information, amounted to only 121,194—less than 25,000 a year, less than one month's increase of our population. Nearly the whole expense was supplied by the emigrants themselves and there was a disposition to complain that the best men went, taking with them considerable amounts of capital. At this time the power of the United States to absorb a large amount of laborers as distinguished from colonists, was little known. Mr. Tucker estimates the whole number of immigrants into those states from 1810 to 1820 at 114,000. From 1820 to 1830 the number nearly doubled having been, according to Mr. Tucker's ⁵² estimate 200,000, or 20,000 a year. From 1830 to 1840 it more than doubled, amounting for those ten years to 472,727.

This however includes both colonists and emigrants. In 1841 immigration made an enormous start. It suddenly rose from 47,000 a year to 125,256 and in 1842 to 151,660. For the next two years it rather diminished, having been 112,728 in 1843 and 111,910 in 1844, but in 1845 it rose to 153,222, in 1846 to 220,576, and in 1847 to 300,000 ⁵³ of which fifty per cent is supposed to be from the British Islands.

Mr. Minturn from whose evidence taken by the House of Lords Committee on Emigration from Ireland I extract these figures, is an owner of emigrant ships, and a commissioner of emigration in the state of New York. He is asked how the emigrants obtain employment, and answers—

Principally on the public works—on the canals and railroads in New England, New York and Pennsylvania, and even in the far west down to Indiana and Illinois. The wages in summer are a dollar per day and in winter about 3s. 6d. per day.

That rate (say the committee) presumes an active demand for labor, and a great power of absorbing it.

The demand for labor (he answers) was so great during the year, that all the able-bodied male emigrants who arrived found employment, and were willing to work.

Was their labor satisfactory?

There are occasional strikes for wages, but their labor is invaluable to us. We could not carry on our public works without them. Of late years, we have had a very large demand for railways, canals, and mining operations. There is no present probability of this kind of labor being cut off. Every settlement opens a demand for increasing emigration. The people who go there call for their friends to follow them, and in time railroads, canals, and all the improvements of the old states are introduced.

It is quite in the common course of events, for the agricultural laborers in the west, from their savings, to purchase lands, and become independent farmers.

With land at a dollar and a quarter per acre, the capital required can be saved in a few years. The houses are built of logs which are cut on the spot.

Reviewing (he is asked) the whole of your evidence and the experience on which it is founded, are the committee to conclude that you conceive emigration to be a benefit to the United States and that its interruption would be a calamity?

I conceive it to be an inestimable benefit;—a benefit first in its effect on foreign and internal commerce, and a benefit in the capital that it brings of money and of labor. If the value of labor was to be estimated by the cost of slave labor, millions would not estimate its worth to America.

What incidental effect (he is asked) does emigration produce, upon the trade and navigation in the United States?

It has become one of the greatest supports of commerce. The amounts paid for the passage of emigrants go very far towards paying the expense of the voyage from America to Europe and back. I estimate the amount of freight paid by emigrants to the United States in the emigration of last year at five million of dollars. The effect is greatly to diminish the cost of the transport of cotton and provisions from America to Europe. The freights of those articles would be very greatly increased but for the proportion of the expense of the voyage borne by emigration. The great reduction which has taken place in the cost of the transport of cot-

ton and so forth could not have been borne but for the support which the ships received from emigration.

Then it would be right to infer that in proportion as emigration increases the advantages to trade which you describe, will augment likewise, and that in proportion as trade augments the facility for emigration will augment also?

Certainly, they act and react on each other. Freights never were so low as they are this year. Ships could not come here at these freights except for the large amounts which they receive for the conveyance of passengers back. So far this year the amount of the return freight for emigrants to New York has been greater than the amount of the outward freights from thence to England. The passage money of emigrants is much more important than the freights of merchandise from England to the United States. Many British vessels carry emigrants to New York and after landing there proceed to the southern ports for cotton, or to Canada for timber.

This examination took place on the 20th of June, 1848.

We have seen that Mr. Minturn estimated the immigration⁵⁴ into the United States of 1847 at 300,000 persons, of whom half would come from the British Islands. The Ninth Report of the Colonial Emigration Commissioners, that for 1849, states the number of persons who went straight from the British Islands to the United States at 142,154; and that of those who went to our North American possessions at 109,480, of whom between sixty and seventy thousand made our colonies only a passage to the United States. This would give a British and Irish immigration into the United States in 1847 of above 200,000 persons. In 1848 the number who emigrated from our Islands direct to the United States was 188,233 and to the other North American colonies 31,332—which supposes a British and Irish emigration to the United States direct and through our colonies of more than 210,000 persons.

According to Mr. Minturn's statement that our emigrants furnish one-half of the American immigration, that immigration must have amounted in the year 1848 to above 400,000 persons. It must be remembered that since he gave his evidence two circumstances have occurred which will materially facilitate the commercial intercourse between the United States and the British Islands. One is the abandonment of the last remnant of agricultural protection, the other the repeal of the navigation laws. Each of these events will contribute to augment the traffic between the two countries,

and consequently, according to the general law of commercial production, to diminish its expense.* 208

3. Tonnage Requirements and Financial Aspects of Emigration. Mr. Minturn affirms broadly that the influx of immigrants into America has up to this time increased the demand for them. And as long as they are profitably employed it is obvious that this must be the case. If the unskilled laborer receives, as he appears to do, about £60 a year he must, in order to give the capitalist the usual profit, produce in a year commodities or services worth £69. If we suppose the able-bodied men to constitute about one-half of the whole number—which seems to be rather less than the real proportion—the 400,000 persons whom I estimate to have immigrated in 1848 produced in the course of their first year commodities or services worth £13,800,000. How much of this new creation was applicable to the production of a new and additional emigration in 1849 we cannot estimate with an approach to accuracy. That a considerable portion was so employed is proved [by the following statement of the Commissioners of Emigration]:

It has been mentioned in former reports that a considerable portion of the expense of emigration from Ireland has been defrayed by money remitted to Ireland from North America by parties who had previously emigrated. This is one of the most pleasing features of the emigration and the most creditable to the Irish character. It is impossible to obtain very accurate information, but it has been ascertained that the amount paid in the United States for passages or remitted through houses in Liverpool or in Ireland for intended emigrants, not including the house of Baring Brothers and Co., in 1848 was upwards of £460,000. It would, under these circumstances, not be unfair to assume that three-fourths of the whole expense of the emigration from Ireland last year was defrayed by those who had emigrated in previous years; and as emigration thus begets emigration it would seem to follow that the numbers who will annually leave Ireland are likely to increase until the causes which render emigration desirable shall have ceased to operate.⁵⁵

The emigration of 200,000 persons cannot have cost less than £800,000. The Irish settlers then supplied £600,000 towards it.

We have seen that during the last nine years the immigration into the United States about decupled; that it rose from about 40,000 persons a year to about 400,000. Is it possible that in the next ten years it can increase in the same proportion, and therefore that in 1859 it will reach four millions of persons a year? I am inclined to think that it is *not* possible. In the first place, I do not think

that within that time a sufficient number of new vessels could be built. Supposing each emigrant ship to carry 380 passengers and to be manned by twenty sailors, and to make three voyages a year, it would require more than 3,300 ships of 800 tons each—a fleet not much less than the whole navy of England.⁵⁶

In the second place, I doubt whether even America could at present, or within ten years, provide for such an addition to the hundreds of thousands who are now pouring every year into her wildernesses. But when I look at what has happened I feel the danger of prophecies. What Englishman would have ventured in 1825, when the whole number of emigrants who left our shores amounted to only 14,891, to predict or even to admit as a possibility, that the emigration of 1847 and 1848 would exceed 500,000? What American in 1821, when the whole immigration did not amount to 12,000 a year, could have conjectured that in twenty-five years it would reach 400,000? Just the same difficulties of want of ships to carry them, and of want of capital to employ them, would have been raised as those which I have suggested; and a further question would have been asked: from what fund could the voyage and outfit of more than 250,000 persons be annually supplied? That £600,000 would be annually remitted for that purpose by Irish settlers would have been thought a supposition too wild to be seriously entertained.

In the face of this experience I will not venture to assign any bounds to the power of the British Islands to send out emigrants, or to the power of the United States and of the still vaster regions which form our colonial empire to receive them.

The difference between the population of Great Britain in 1831 and 1841 was 2,201,406. The difference between the population of Ireland in 1831 and 1841 was 407,723, making together an aggregate difference of 2,609,129 persons, or an annual increase in the whole British Islands of 260,912 persons a year. But during those ten years there was an emigration of 743,150 persons. If we add those to the natural increase it raises it to 3,352,279, or 335,227 a year. It appears therefore that the emigration of 250,000 a year, which is now going on, is enough to keep down three-fourths of the annual increase of the British Islands; that an emigration increased by only one-half, that is to say, raised to 375,000 a year, unless met by an increased procreation, would every year diminish our population; and that it is probable that if our emigration were tripled—were raised from 250,000 a year to 750,000 a year—no procreative

force which we have as yet employed would prevent Great Britain and Ireland from being gradually emptied of their inhabitants.

The test of practicability is almost always expense. An annual emigration to the United States of 500,000 persons would, we see, all other things remaining the same, keep our population below its present limits. At £4. 10s. 0d. a head, the present cost (which however is diminishing), this would cost £2,250,000 a year; of which three-fourths, or £1,687,500, might be expected to be remitted from America, leaving to be supplied by the people of Great Britain and Ireland and from the Imperial exchequer £562,500, or about three-pence per head per year on our whole population.* 209

4. Effect of Large-Scale Emigration on National Wealth. It may be supposed, however, that the abstraction of 500,000 persons every year, though beneficial in some respects, would be injurious in others: that it would be a loss of a large amount of productive power. I might be plausibly asked whether, if the arrival of this vast emigration is beneficial to America, their departure is not likely to be mischievous to us. And the argument is often illustrated by metaphors taken from bleeding.

I may be told that besides the loss of people there is a loss of capital; that though the poorer emigrants may have their expenses defrayed by foreign remittances, the richer ones take out considerable sums. I have been told that the average amount of money brought by emigrants to New York is \$10,000 a day—a sum sufficient materially to influence the exchanges.

The obvious answer is, that the densest population of any American state is 86 per square mile, the average population of England 300; that of all species of capital the most important in an old country is land, with its buildings and improvements—and this of course remains. The clothes and tools which the emigrants take out are not missed. The loss of the money is far more than compensated by the additional demand for our manufactures, and by the diminution of the expenses of freight between the two countries. It may be added that the labor which is productive abroad is often useless or worse than useless at home. The evidence of Mr. Aubrey de Vere which I quoted in the last [chapter], showed that in the face of a redundant population, trained in such a school as Ireland, not only considerable agricultural improvements, but the mere ordinary use of land and capital may become impossible. Yet the men whom he describes as conspiring to work ill and slowly, the savages whom Captain Kennedy describes as in their appearance,

clothing, and mode of living, hardly human, as soon as they have crossed the Atlantic are transformed under the stimulus of good wages and example into excellent workmen.

The evidence taken by the House of Lords Committees in 1847 and 1848 is full of proof of this.

I find (says Mr. Pemberton, question 876) that the Irish are better adapted for all works requiring great strength; and not only so, but all laborious works in the United States and Canada are chiefly performed by the Irish emigrants; and so far I think they are better calculated than any other class of emigrants for settling in a new country without the means of purchasing land.

Sir Thomas Mitchell, the Surveyor General of New South Wales, is asked by the Committee of 1848—

What report are you able to make to the Committee as to the character of the Irish laborers?

From my own experience I found them the best and the most hard-working. There were three or four Irish laborers known to me in Sydney, whom I employed when I had any very hard work to do, knowing they would give me an honest day's work, and work hard; they were my hard-working men.

Mr. Therry, resident judge for the district of Port Philip, is asked—

Do you think there is anything in the nature of the Irish settler that unfits him for the peculiar work that is required on the part of an emigrant to the colony?

He answers that for some descriptions of labor the Irish are preferred as, for instance, for shepherds, for hard labor, for plowing, and the ordinary agricultural labor.

The question however whether the wealth of the state is likely to be increased or diminished by an emigration so great as very nearly to destroy its power of increase has been solved. We have seen that for the last half century Connecticut has been subject to such an emigration. The landed property of that state was valued for the purpose of imposing a tax in 1798 and in 1818. During those twenty years it increased in value from \$48,313,434 in 1798 to \$86,546,841 in 1818, that is to say, nearly doubled.* ²¹⁰

CHAPTER VII

THE REMEDIAL CHECKS TO POPULATION: SYSTEMATIC COLONIZATION

1. The Evils of Unregulated Emigration. 2. Wakefield's Views on Systematic Colonization. 3. Selection of Emigrants and Disposition of Public Lands.

1. The Evils of Unregulated Emigration. In the last [chapter] I treated of spontaneous unregulated emigration. I showed that without any assistance from the state, without any selection of emigrants, in short, without any interference on the part of the government, the population of a country may be kept down simply by the remedial check: by merely allowing it to spread itself over less thickly-peopled districts. Such an operation, however, requires the concurrence of several favorable circumstances.

In the first place, the tendency to migration differs in different races of mankind, and perhaps in the same race at different times or under different circumstances. At present the only Europeans who readily expatriate themselves are the natives of the British Islands and the Germans. The Spaniards, the Portuguese, the Dutch, and the French, each of whom once founded a great American or Asiatic empire have lost by far the greater part of their ancient dependencies and make little use, as an outlet for their population, of those which they retain. Many centuries have passed since the Italian, the Slavonic, and the Scandinavian nations ceased to be migratory.⁵⁷ In this, as in many other cases, the tendency requires example and concurrence. To seek his fortune at the Antipodes, or even on the other side of the Atlantic is a scheme which never occurs to a Neapolitan, and if it did occur to him he would not know how to set about it. The habit of emigration, therefore, is not easily acquired and when lost is not easily recovered.

In the second place, the expense is always a serious, and in many cases an insurmountable, obstacle. And the consequence has been, as I have already remarked, that until within a few years no European nation has materially relieved itself by emigration. It is further to be remarked that all the emigration of the 18th and the

beginning of the 19th century was unregulated. That from the Continent generally took place against the will of the government, that from the British Islands was unassisted, and therefore undirected, by the state—except in the case of our penal settlements and with respect to them the interference of the state was not intended to benefit either the colonists or the colony.

It is obvious that emigration the same in amount may be so managed as to affect very differently the population of the country that sends and of the country that receives. In England about 120,000 persons every year attain the age of fifty. Were they all to be annually removed at the beginning of their fifty-first year such a removal would probably tend to increase our population. The loss of those who went would diminish little either the productive or the procreative power of the country; those whom their absence would call into existence would add to both. On the other hand, in England about 150,000 girls every year attain the age of fifteen. Were they all annually removed as soon as they entered their sixteenth year, in a few years the whole population of England would become extinct. As a general rule it may be laid down that emigration keeps down the population of the mother country, and increases that of the colony, in the proportion in which it consists of females capable of breeding. But they form not only a small but an unduly small part of a spontaneous emigration. A considerable proportion of such an emigration naturally consists of unmarried men, who of course are the persons best fitted to encounter the real hardships of emigration and least likely to be deterred by its imaginary difficulties. The married generally take with them their wives and children, or, what comes to the same thing, send for them afterwards,—but few of the aged or even of the middle-aged choose to leave home.

The analytical returns of emigration published by the Emigration Commissioners distinguish the steerage emigrants according to sex. By the return of 1848 it appears that of 137,122 who went from England to the United States in that year 78,804 were males, and 58,318 were females; and out of 5,417 who went to Canada, 3,140 were males and 2,277 females. In countries which increase principally by means of immigration the necessary consequence is a great excess of males. New South Wales on the 2nd of March, 1846, contained 112,573 males and only 74,840 females. In March, 1841, the time of the preceding census, the disproportion was still greater. The males were then 87,298, the females 43,558. In the

country which the emigrants quit the excess is of course the other way. The population of England and Wales in 1841 consisted of 7,771,094 males and 8,135,647 females. The excess was greatest between the ages of twenty and twenty-five. The males between those ages having been 719,514 and the females 825,662. Yet at this time the emigration from England, though positively large, was comparatively small. Of course this disproportion is mischievous to all parties. It checks the increase, injures the morals, and impairs the happiness of the colony; and it injures the morals, aggravates the distress, and perhaps somewhat increases the population of the mother country.

Another consequence of unregulated emigration, or, to speak more precisely of unregulated colonization (meaning by colonization emigration to a colony) is the undue dispersion⁵⁸ of the colonists. Among the privileges of the rich those which most excite the envy of the laborer in an old country are the possession of land and freedom from restraint. If he reach a country where land is to be had for nothing he naturally throws himself upon it. He selects not, as has been generally assumed, the most fertile portions, but those which can be most easily worked, the hillsides which are free from timber and to a considerable extent drained by nature. Left to his own resources, with no assistance except the voluntary aid of a few thinly scattered neighbors, he is forced to do everything for himself, and of course does everything slowly and ill. As he has no live stock, and consequently no manure, the patches of land which he cultivates are quickly exhausted, and his resource is to abandon them and go farther back into the wilderness, farther still from human society. Of course this is unfavorable to the two great means by which industry is rendered productive, the division and the combination of labor. It is unfavorable also to moral and intellectual cultivation. I showed in a former [chapter] the mischiefs of overpopulation. Those of underpopulation are less painful but almost as degrading. The Guacho of the Pampas or the backwoodsman of North America is a bolder, better-fed, and happier animal than the southwestern Irishman, but more ignorant and more brutal.*²¹¹

2. Wakefield's Views on Systematic Colonization. It is a remarkable instance of the slowness with which political knowledge advances, that though colonization has been vigorously carried on for above 3,000 years by the nations which during that long period have from time to time been the most civilized, the mode of

effecting it in the manner most beneficial both to the mother country and to the colony was discovered only about twenty-five years ago. The discoverer was Mr. Edward Gibson Wakefield. It is now just twenty years ⁵⁹ since he published his *Statement of the Principles and Objects of a proposed National Society for the Cure and Prevention of Pauperism by means of Systematic Colonization*.

His system rests on three principles.

First, that the colonizing state, or, as it is usually called, the mother country, should assume as between itself and its subjects, dominion over the waste lands of the colony and dispose of them only by sale. This has been for many years the practice of the government of the United States but when Mr. Wakefield wrote it was not the English system. Sometimes we considered the waste as without an owner, or as owned by the savages who wandered over it; and we acknowledged the title of those who obtained the possession of parts of it by mere occupancy, or by purchasing from the aborigines. More frequently the Crown assumed the right of property, to which on feudal principles it is entitled, and granted the waste lands generally in large masses, to individuals or to companies. In the very last colony which was founded before Mr. Wakefield's publication, that of Western Australia, Mr. Peel went out, with the first expedition, a grantee of a million of acres. Nearly the whole of the available land in Prince Edward's Island, a country half as large as Ireland, was granted in one day.

The second of Mr. Wakefield's principles was that the price for which the land was sold should be applied in bringing over emigrants to the colony.

The third, that these emigrants should consist exclusively of young adults of both sexes in equal numbers.

By means of the first of these measures he hoped to prevent the undue dispersion of the colonists and to force the bulk of them to be laborers for hire instead of small farmers. By means of the second, to provide a fund to supply the capitalists with laborers for hire. By means of the third, to occasion the emigrant to be of the kind which would give to those capitalists the best laborers, and withdraw from the mother country and place in the colony the class most conducive to the advance of population; and therefore, the class which it is most useful to remove from an over-peopled country and to introduce into an underpeopled one.

The main principles of this theory were adopted by the English

government very soon after its promulgation and have been persevered in, so far as they have been thought practicable, ever since.

In [his] lectures [on political economy] delivered [at Oxford] in 1841, Mr. Merivale considered in detail its merits and defects, and related the history of its working up to that time.

The first, perhaps the principal practical difficulty which those who had to carry the system into execution encountered, was to fix at what price the land should be sold. This is a difficulty which besets every one whose purchases or sales are made on any except the ordinary grounds of private interest. If the object of the government in selling waste lands were the same as that of an individual proprietor, merely the obtaining the largest possible permanent income, the question would be comparatively simple. By gradually raising the price while the demand continued to increase, by gradually lowering it, if the demand appeared to diminish, a sufficient approximation to the most profitable price would be obtained. But the object to be aimed at is, according to Mr. Wakefield, to create and maintain the most advantageous proportion between capital and labor.

The legislator (says Mr. Wakefield) could always tell whether or not labor for hire was too scarce or too plentiful in the colony. If it were too plentiful, he would know that the price of new land was too high; that is, more than sufficient: if it were hurtfully scarce, he would know that the price was too low, or not sufficient. About which the labor was—whether too plentiful or too scarce—no legislature, hardly any individual, could be in doubt; so plain to the dullest eye would be the facts by which to determine that question. If the lawgiver saw that the labor was scarce and the price too low, he would raise the price: if he saw that labor was superabundant and the price too high he would lower the price: if he saw that labor was neither scarce nor superabundant, he would not alter the price, because he would see that it was neither too high nor too low, but sufficient. He would always be able to judge whether new land was supplied too fast, or not fast enough, or at the rate of a happy medium between excess and deficiency. The evidence on which the legislature would form its judgment, would be all the facts which show whether labor is scarce or superabundant, or neither one nor the other.⁶⁰

Now I must confess that the question which Mr. Wakefield thinks plain to the dullest comprehension appears to me liable to great difficulty. The extremes of course are easily intelligible. It is obvious that labor is superabundant in Ireland, where it is

to be obtained at a price on which the laborer cannot subsist in health. It is obvious that it is too scarce in South Australia where sheep are boiled down because shepherds cannot be obtained, and in Trinidad where the canes rot on the ground for want of hands to remove them. But between these extremes the gradations are so numerous that the transition from excess to deficiency becomes imperceptible. Mr. Wakefield himself has given a sort of list of the elements of the calculation which show how liable to error every solution of the problem must be.

The sole object of a price (he says)⁶¹ is to prevent laborers from turning into landowners too soon: the price must be sufficient for that one purpose and no other. The question is, what price would have that one effect? That must depend, first, on what is meant by "too soon"; or on the proper duration of the term of the laborer's employment for hire; which again must depend on the rate of the increase of population in the colony, especially by means of immigration, which would determine when the place of a laborer, turning into a landowner, would be filled by another laborer: the rate of labor-emigration again must depend on the popularity of the colony at home, and on the distance between the mother country and the colony, or the cost of passage for laboring people. Secondly, what price would have the desired effect, must depend on the rate of wages and cost of living in the colony; since according to these would be the laborer's power of saving the requisite capital for turning into a landowner: in proportion to the rate of wages and the cost of living, would the requisite capital be saved in a longer or a shorter time. It depends, thirdly, on the soil and climate of the colony, which would determine the quantity of land required (on the average) by a laborer in order to set himself up as a landowner: if the soil and climate were unfavorable to production, he would require more acres; if it were favorable, fewer acres would serve his purpose: in Trinidad, for example, ten acres would support him well; in South Africa or New South Wales, he might require fifty or one hundred acres. But the variability in our wide colonial empire, not only of soil and climate, but of all the circumstances on which a sufficient price would depend, is so obvious that no examples of it are needed. It follows of course that different colonies, and sometimes different groups of similar colonies, would require different prices. To name a price for all the colonies would be as absurd as to fix the size of a coat for mankind.*²¹²

3. Selection of Emigrants and Disposition of Public Lands. It is now nearly twenty years since Mr. Wakefield's principle that all colonial land at the disposition of the government should be sold instead of being granted has been adopted. During that

time we have tried every plan. It has been sold at a high fixed price and at a low fixed price. It has been sold by auction without any reserve, it has been sold by auction at an upset price below which no offer was received. If not bought at the auction it has sometimes been put up again, and sometimes has been sold by private contract at the upset price. And the result has been that no one scheme has been generally adopted—indeed, that scarcely in any one colony has any one scheme been persevered in.

In Canada the public lands are sold without auction at a price fixed from time to time by the governor in council. [According to the Colonization Circular published] in June, 1849, the price per acre was in Upper Canada 8s. currency, about 6s. 7d. sterling; in some districts of Lower Canada 6s., in the rest 4s. currency. In Nova Scotia the price is also fixed, at 1s. 9d. sterling per acre. In New Brunswick it is sold only by auction with an upset price generally about 2s. 6d. sterling per acre, but varying according to situation. In Newfoundland auction also prevails. The upset price is fixed by the governor, but cannot be less than 2s. per acre. After two attempts at an auction it may be sold by private contract.

In Australia the public lands are divided into three classes: town lots, suburban lots, and country lots. The two first cannot be sold except by auction, the upset price being named by the governor. Country lots must be put up to sale by auction once at a price which cannot be less than £1 per acre, but may be raised by the governor. If unsold they may be disposed of by private contract at not under the upset price. In the Falkland Islands—for even these abodes of what Dr. Johnson called “tempest beaten barrenness” have their land sales—the Australian system is adopted; in the Cape and Natal only auction prevails: the upset price in the former being 2s. per acre, in the latter 4s.

The second of Mr. Wakefield's principles, the exclusive devotion to emigration of the produce of the land sales, has been found still less susceptible of complete execution. The public expenditure of a colony bears a much larger proportion to its private expenditure than that of an old country. Roads, bridges, canals, harbors, and public buildings have all to be created. The mere survey of the waste is a matter of great and permanent employment. Such a community however is generally averse to taxation. Its leading members are persons who have come out to make their fortunes; many of them do not intend to be permanent residents, and oppose any expenditure for distant results: and all desire

to confine within the narrowest limits the deduction which rates for public purposes appear to make from their profits. Now the revenue derived from land sales is an obvious substitute for taxation. They may not be able to answer the arguments of those who tell them that the devoting the whole of it to the purposes of emigration is its most productive employment, but they do not feel their truth. To which it must be added that those who suffer most from the want of labor are the agricultural portion of the settlers; those who pay most in taxation are the dwellers in the towns. And in every community, but especially in one where the country population is thinly scattered, it is the inhabitants of the towns that make themselves best heard.

The consequence has been that in British America,—the colonies in which both from their extent and population and from the neighborhood of the United States, the metropolitan authority is weakest and the control of the produce of the land sales has been given to the local government,—the whole is mixed with the public revenue, and no portion whatever is employed in emigration. In the other colonies the home government has been forced to accept a compromise. One-half of the land revenue is devoted to emigration. The remainder forms part of the general revenue of the colony, but with a preferable appropriation to the making roads, bridges, surveys, and the expenses connected with the aborigines—these matters being considered peculiarly connected with the land.

The point in which Mr. Wakefield's plan has been followed with the smallest deviation is the selection of emigrants. Nearly an equal proportion has been kept between the sexes. Of the 18,682 persons who were sent to New South Wales between November, 1847, and May, 1849, 9,018 were males and 9,664 were females. The proportion of children has been considerable. Out of 8,362 persons dispatched to South Australia in 1848 and the first three months of 1849, 2,564 were under the age of fourteen. This appears to have taken place rather against the wishes of the Emigration Commissioners. For in the circular in which they invite the candidates for emigration they state that young married couples without children will be preferred. They refuse however to allow parents who have children to leave them behind, and probably find it difficult to obtain a sufficient number of childless young couples. They insist on the emigrants belonging to the laboring classes. "All the adults," they say, "must be capable of labor

and must be going out to work for wages. Persons intending to buy land in the colony or to invest capital in trade there are not eligible."

As soon as the system was put into operation a question arose as to the extent to which the expenses of the emigrant ought to be defrayed out of the land fund. Ought that fund to pay for his outfit, or for the cost of his journey to the port of embarkation, or for the bedding and mess utensils which he must use while on board? It was resolved that it ought not. The emigrants are therefore required to appear at their own expense at the port of embarkation, with their outfit ready and to pay £2 a head for bedding and mess utensils. These, on their arrival, they are allowed to retain. The whole expense thus thrown on the emigrant amounts, at an average, to £5. Where a free passage is given the remaining expense, amounting to about £14 a head, is paid out of the land fund. To certain classes however, who are not considered eligible for a free passage, an assisted passage is given—that is to say, a payment is required rising from £6 to £15 in proportion as the applicants differ from the best type, a young agricultural couple. Thus an agricultural laborer between forty and fifty years old pays £6; between fifty and sixty, £11; above sixty, £15; a mechanic above forty pays £8; above fifty, £12.

The effects of the system in our Australian colonies have been very striking.

In 1828 the colonial population of Australia was 53,520. In 1838 it was 145,680. In 1848 it had risen to 351,610. The progress in wealth has been still greater. The exports, which are the best test, were in 1828 of the value of £181,510, rose in 1838 to £1,391,081, and in 1848 to £2,889,730. In the United States which have hitherto been supposed to exhibit the most remarkable progress that the world has ever seen, population doubles about every twenty-five years. In Australia it more than doubles every ten years. It is not impossible that during the [existence] of some of those who [are now living] the population of Australia may be as large as that of England is now. It not only is possible, but certain, that before a hundred years have passed the number of persons speaking the English language, preserving English institutions and ennobled by an English descent, will be much larger in America and much larger in Australia than it is now or indeed will then be in Europe. Other nations have put together great empires by conquest or by succession, England⁶² will have created them.*²¹⁸

CHAPTER VIII

RÉSUMÉ OF THE THEORY OF POPULATION

1. *Preventive Checks.* 2. *Destructive Checks.* 3. *Remedial Checks.*

1. Preventive Checks. The power of any plant or animal to increase by generation must depend partly on its fecundity and partly on its longevity, and its fecundity depends partly on the amount and partly on the period of reproduction. Such is the fecundity and longevity of man that the human race is capable of doubling every twenty-five years. The population of the United States, after allowing for immigration, has increased at this rate during the last one hundred years. At this rate of increase the population of the United States will amount in five hundred years to about twenty million of millions. The population of England has doubled during the last fifty years. If it continue to augment at that rate for 1,000 years it will then amount to about eighteen million of millions. What are the causes which will prevent these results? What are the causes which render it certain that the population of England 1,000 years hence, instead of eighteen million millions, will not amount to one hundred millions?

These causes are what are called the checks to population. I divided them into three classes: the *preventive*, the *destructive*, and the *remedial*.

The preventive checks are four: *prudence*, *luxury*, *law*, and *private property*.

Prudence requires little explanation. By *luxury* I mean the easy and somewhat self-indulgent life led by women in the higher classes of modern society, and which is unfavorable to robust health and to fecundity; and the desire of costly indulgencies, which induces many men, in every class, to avoid encumbering themselves with a family. Luxury differs from prudence in being solely self-regarding. When a man remains single because he fears that his income as a married man would not enable him to educate his children, he is *prudent*. When he is deterred from marriage by the fear that he must give up his opera box, his champagne, or his hunters, I call him *luxurious*.

Luxury and prudence may be called the self-operating or intrinsic preventive checks. They derive their force from the physical or intellectual or moral qualities of those whom they restrain, and are generally powerful in proportion to the mental and bodily cultivation and refinement of each individual. The remaining preventive checks may be called extrinsic; they are imposed by the will of other parties and affect individuals without requiring their assent. They are the restrictions imposed by law or by the existence of private property in land.

Under the term *law* I include the legal restraints unknown in England, by which, in many parts of Europe, the government endeavors to prevent the marriage of persons who are supposed to be unable to support a family.

By *private property* I mean the checks opposed to marriage by the interest of the proprietors of the soil.

The intrinsic preventive checks restrain sufficiently the increase of the educated classes. Really improvident marriages are rare among them, and the families to which they give rise generally become extinct. The children of a gentleman prefer celibacy to becoming the parents of tradespeople, the children of tradesmen prefer it to having children who are to be laborers.

Among the higher classes the principal intrinsic check is prudence. Among the laboring classes it is luxury. The ordinary wage of labor must in a free country be sufficient to support an ordinary family, or the population would gradually wear out. A laboring man therefore of average good conduct, health, strength, and skill, even though he have accumulated nothing except his clothes, his tools, and the furniture of his cottage or lodging, can scarcely be said to be imprudent if he marries. He has a fair prospect of bringing up a family in his own condition. But he must make a great sacrifice of luxuries. By the supposition, as a bachelor he spent all his earnings on himself. Married he will have to divide them with others. This fear operates strongly, and on both sexes. At least one-fifth of the marriageable women of England are domestic servants, of whom probably not one in one hundred is married, and not one in twenty ever does marry until she is past, or nearly past, childbearing. They refuse to encounter the physical evils of poverty.

The instincts however which prompt to marriage are strong and in every large society there are classes who obey little except instinct. And in every class there are individuals who are pre-

vented by intellectual or by physical, or—what is much more common and much more mischievous—by moral defects from producing what will afford a maintenance for their families, and, sometimes, for themselves. These form the pauper class. Though miserable themselves they are never in a well-governed community sufficiently numerous to injure materially the rest of the community.

Where the government takes notice of them it generally shuts them up in workhouses or hospitals, where the sexes are separated and their increase by propagation is stopped. When left to themselves by the state they usually live a wandering life, tolerated as temporary visitors, but rejected as residents, and die comparatively young of the diseases incident to a life of vagrancy. But if this degraded class is allowed the use of land they multiply on it like other brutes to the utmost extent to which they can extract subsistence from it. They can build a hovel out of stones, mud, and sods, scratch enough ground to raise potatoes, and get enough to make their small purchases of clothes by doing odd jobs for their richer neighbors. They marry of course very early, as they are not deterred by prudence or luxury. A life of hardship is favorable to the fecundity of their women, and the shortness of the period of reproduction more than compensates for their low average longevity. To prevent such a state of things seems to me to have been the purpose for which Providence created landlords.

It is the interest of the landlord that his estate should be occupied by precisely that number of persons which will produce to him, after providing for their own maintenance, the largest or rather the most valuable surplus produce. It is his interest therefore to exclude from his land all laborers of less than average efficiency. And of good laborers, it is his interest to admit only the number which in the existing state of agricultural skill is profitable. At present in England the average number whose labor is profitable is about four laboring families to an hundred acres. If a fifth family were added they might perhaps produce their own maintenance, and no more; a sixth might produce four-fifths of their own subsistence; a seventh would not produce perhaps more than three-quarters of their own subsistence; an eighth, one-half; a ninth, one-third; a tenth, one-fourth. It is obvious that in a short time the whole surplus produce would be absorbed. This is the state of a neglected estate in Ireland. This is the state of an English parish in which maladministered poor laws have en-

couraged the growth of population without regard to the demand for its services. This would be the state of any country in which private property in land were not recognized or the landlord were by the state of the law or of public opinion deprived of the power of regulating the number of his tenantry.* ²¹⁴

2. Destructive Checks. The destructive checks to population, called by Malthus the positive checks, are famine, war, and disease. Famine is peculiar to a barbarous country. A civilized people always consumes several different species of food, and always possesses superfluities which can be made to supply the place of a crop which fails. Nor is war, carried on according to modern usages, directly destructive of population. It acts indirectly, as a preventive, by employing in barren military preparation ⁶³ labor and capital by which Europe could support in comfort tens of additional millions of inhabitants; but the destruction which it actually inflicts is trifling. In November, 1847, there was an influenza in London and a great civil war in Switzerland. The influenza killed more than twice as many persons as the war.

Disease is the destroyer of civilized people—not that average longevity in a civilized nation is less than in a savage one. It is greater. But among savages longevity is tolerably equally diffused. In a great opulent and productive country some classes enjoy twice or three times the average life of others. The average age at which the gentry die in Rutlandshire is fifty-two; that at which the laborers die is thirty-eight. In Liverpool the gentry die at thirty-five, the laborers at fifteen. For one child that dies under five years old in the rest of England five die in Manchester and ten in Liverpool. Disease however, though I have enumerated it among the checks to population, does not seem always to diminish it. The most unhealthy districts are often the more populous. The early deaths of children shorten the period of lactation, the premature deaths of parents make room for the earlier marriage of their children. Man becomes a more short-lived but not necessarily a less abundant animal.* ²¹⁵

3. Remedial Checks. I lastly considered the third of the checks to population, the remedial check, emigration.* ²¹⁶

I showed that in the present state of the world it is in the power of emigration to keep down the population of an extensive district, or even of a great country, so effectually as to make its increase insensible, perhaps even to occasion its decrease.* ²¹⁷ I showed from the example of Connecticut that it is in the power of an ex-

tensive country, without submitting to any of the preventive or destructive checks, deterred from early marriage by neither prudence nor luxury, ignorant of famine and of war and enjoying one of the healthiest climates of the world, to keep down its population to about one-fourth of the English rate of increase by merely allowing it to flow over into the unoccupied regions of the west. I showed that an emigration, similar in kind and not very inferior in extent is now relieving the British Islands; and I expressed a hope that the time is not far distant when emigration will be with us, as it is in New England, the principal check to population.* ²¹⁸

Perhaps at no previous period during the history of the world has it been possible to do this by the unconnected and peaceful efforts of individuals and families. The emigrations of antiquity and of the middle ages consisted either of large detachments of citizens sent out as a public measure, and, to a considerable extent or wholly at the public expense; or they were the migrations of whole nations dissatisfied with their own climate or soil, or dispossessed by another migrating tribe, and allured in the former case and forced in the latter to occupy a new territory.

To the former class belong the colonies of the Phenicians, Greeks, and Romans and most of those of modern Europe. To the latter the great military migrations of which the march of the Israelites from Egypt to Syria, and that of the Helvetii from Switzerland to France are among the best known instances. Such emigrations as these cannot be considered as among the checks to population. The former are too expensive to be undertaken either very frequently or on a considerable scale. To send out a body of 10,000 colonists, provided with the capital necessary to establish themselves in an unsettled country, is in fact equivalent to sending out an army. A state large enough to do so without inconvenience must be so large as to be little relieved by so small an abstraction from its numbers. A state small enough to perceive the benefit could not bear the expense. The latter, the movement *en masse* of a whole nation can be the act only of a barbarous people, with little capital incorporated in their land. It belongs rather to the shepherd state than to the agricultural. There are probably few parts of the world in which it is now possible.

To enable a nation to keep down its numbers by the constant spontaneous departure of the requisite portion of its members, not in large swarms, or at the national cost, but quietly and insensibly, from day to day or from month to month, it was necessary that a

region should be open to the reception of its emigrants, in which land and capital should be abundant and labor deficient. It is only within the present century that such a region has existed on an extensive scale. Capital has in general been abundant only in densely peopled countries, where the want of land has rendered its employment comparatively hazardous and unproductive, and the laborer though highly paid in money and in manufactured commodities has been pinched for food—as is the case in England and Holland. And where land has been abundant, it has been at a distance from markets and roads, poor and naked or heavily timbered and undrained, and unserviceable except to large bodies of emigrants, combining their exertions and provided with a considerable amount of fixed and circulating capital. It was not until the Anglo-Saxon race had firmly established itself on the American continent, had accumulated an enormous capital, had intersected with water and steam communications a territory larger than the whole of Europe, had scattered over it towns which on our Continent would be called capitals, and had created permanent supplies of food far exceeding even their own vast consumption that the indigent unskilled laborer could rely on finding work in any country but his own.

Forty years ago the poor emigrants who landed in an American port had to look for employment in the town, or in its neighborhood. To proceed further to the new settlements on the west of the Alleghanies would have been a work of more difficulty and expense than to get from England to New York. The few employments therefore which a town affords to unskilled laborers were quickly overstocked. But in 1847 the 129,000 emigrants who landed in New York were besieged by “forwarders” whose business it was to push them into the great labor marts in the interior at prices which, when we consider the low cost of silver in America, seem fabulously small. The rate of passage,⁶⁴ says Mr. Minturn, from New York to Buffalo, a distance of five hundred miles, is \$2.50 to \$3.00; from New York to Cleveland (Ohio) 700 miles, \$5.00; Detroit (Michigan) 850 miles, \$6.00; Milwaukee (Wisconsin) 1,500 miles, \$9.50; Chicago (Illinois) 1,500 miles, \$9.50.* ²¹⁹

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¹ [*I. e.* increase the number of deaths.]

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² [T. R. Malthus, *Essay on the Principle of Population*, 1st ed.] p. 24.

³ [Senior's views on this subject appear to have been completely transformed in an interval of less than twenty years after the publication of his *Outline of Political Economy* in 1836. In the early days of the emigration movement Senior did not anticipate very great results, though he was an ardent supporter of Sir R. Wilmot Horton and other advocates of emigration plans on extensive scales. "All experience shows" (he states on page 41 of the above work) "that no numerous and civilized nation, surrounded by other civilized nations, can venture to rely on emigration as a permanent and adequate check to population. . . . The swarms which we have sent out, and which we now send out, seem to be instantaneously replaced." But after the potato famine of 1846 and 1847 public opinion was in a mode to accept the proposals of philanthropists and enthusiastic reformers, and as a result of that change in public opinion there started an unprecedented stream of emigration to the United States and the British colonies. These new events naturally produced a dazzling effect upon Senior's mind which accounts for his optimistic attitude on the subject.]

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⁴ [More correctly, in the second edition.]

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⁵ ["In the middle classes," the late Prof. Alfred Marshall observes, "a man's income seldom reaches its maximum till he is forty or fifty years old; and the expense of bringing up his children is heavy and lasts for many years. The artisan earns nearly as much at twenty-one as he ever does, unless he rises to a responsible post, but he does not earn much before he is twenty-one; his children are likely to be a considerable expense to him till about the age of fifteen; unless they are sent into a factory, where they may pay their way at a very early age; and lastly the laborer earns nearly full wages at eighteen, while his children begin to earn their own expenses very early. In consequence, the average age of marriage is highest among the middle classes: it is low among the artisans and lower still among the unskilled laborers." *Principles of Economics*, 1890 edition, p. 230.

See also Part VIII, Chap. III, sec. 3.]

⁶ [Cf. Part II, note 25.]

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⁷ [In response to some queries addressed to him by Sir R. Wilmot Horton, in 1830, Senior stated that he had "always maintained that, in the absence of distasteful causes, increased means of subsistence are not followed by a proportionate increase of population; that the natural course of things is improvement, and that the word 'improvement' is only a concise term for designating

an increase of the means of subsistence in a greater ratio than population." See Horton's *Causes and Remedies of Pauperism*, pages 52-3.

Archbishop Whately, a great admirer of Senior, has put the above thought in another form. "*Tendency*," according to him, "seems to mean no more than *it would if it could*. Population might always run a race with production without ever outstripping it. It is the *natural* tendency of population to increase beyond the means of subsistence, but it is the *artificial* tendency of mankind, in a civilized state, to counteract the natural one; and in proportion as civilization or barbarism predominate, the natural or artificial tendency gains the ascendancy."—See MS. notes by Archbishop Whately on Senior's *Outline of Political Economy* (published in 1836), now at the Goldsmith's Company's Library of Economic Literature, University of London.]

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⁸ *Principles*, Vol. I, p. 226.

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⁹ [In 1829 Senior published *Two Lectures on Population* to which he appended a correspondence between himself and the Rev. T. R. Malthus. As is well known, the controversy between these two authors terminated in mutual agreement. It may not be amiss, however, to extract a paragraph or two from the last of Senior's letters reviewing the circumstances which gave rise to the now famous correspondence.

"Your work," Senior wrote to Malthus, "effected a complete revulsion in public opinion. You proved that additional numbers, instead of wealth, may bring poverty. That in civilized countries the evil to be feared is not the diminution but the undue increase of inhabitants. That population, instead of being a torpid agent, requiring to be goaded by artificial stimulants, is a power almost always stronger than could be desired, and producing, unless restrained by constant prudence and self-denial, the worst forms of misery and vice.

"These views are as just as they are important. But they have been caricatured by most of your followers. Because additional numbers *may* bring poverty, it has been supposed that they necessarily *will* do so. The points of view in which we have respectively considered the subject, have, perhaps, been materially influenced by the state of public opinion at the periods when we began to write. You found the principle of population disregarded, or rather unknown; and justly thinking the prevalent errors most mischievous, you bestowed on them an almost exclusive attention. I found that principle made the stalking-horse of negligence and injustice, the favorite objection to every project for rendering the resources of the country more productive; and it is possible, that in replying to those who appeared to me to exaggerate the probable effects of its powers, and to neglect the benefits to be derived from increased production, I may sometimes have under-valued the former, and over-rated the latter."

In the following letter to J. L. Mallet (a member of the Political Economy Club), written in 1835, Senior refers to the above correspondence and reiterates his position on the population question.

"Mr. Tooke has just shown me your note. I am most anxious that the population question should be again raised—especially if we may hope for

your aid in discussing it. But I rather object to the wording of the question.

"Mr. Malthus has not I think very clearly expressed his opinion—but if you will look at his correspondence with me you will find that he nearly abandoned or rather disavowed the doctrine that population has a uniform tendency (in the sense of probability) to exceed subsistence.

"We do not maintain that subsistence has a *uniform* tendency to exceed population but that it has a tendency to do so *in the absence of disturbing causes*.

"We admit that though subsistence increases faster than population, it has not the advance upon population that might be desired. If the population has doubled, subsistence probably has more than doubled, but it would have been well if the ratio in favor of subsistence had been still greater" (RAP¹, VI, 305).

The question referred to in the first paragraph of the above letter was discussed by the London Political Economy Club on August 6, 1835, at which meeting Senior was chairman. It read as follows.

"Is there any sufficient number of well-authenticated facts so far disproving the principle of the *Essay on Population*, as to show that population has not an uniform tendency to increase faster than the means of subsistence; and that circumstances opposed to the impulse of the natural inclinations of mankind gain strength with the advance of wealth and civilization?" (RAP¹, IV, 127).

At a previous meeting of the Political Economy Club, held on February 5, 1835, *i. e.*, shortly after the death of Malthus, Thomas Tooke raised the following question:

"In the absence of disturbing causes, is it more likely that—in a given country—population will increase more rapidly than subsistence, or subsistence more rapidly than population, and would either supposition be conveniently expressed by the word tendency?" (RAP¹, IV, 123).

With respect to this question Mallet wrote in his diary that "the whole artillery of the Club was, strange to say, directed against it [the principle of the *Essay on Population*]. Far from population having a tendency to increase faster than subsistence, Senior and Tooke held that there were facts enough to prove that the reverse was the case; and as to McCulloch, who is always bitter against Malthus, the workings of an envious and mean disposition, he held that there was in human nature a principle of improvement and exertion that was at all times sufficient to counteract and overcome the principle of population, and therefore that Malthus was altogether erroneous, or as he expressed it in his own happy language, false. Torrens likewise attacked the principle of the essay, and said that if it were correct, no savage nations could have escaped from their barbarous state—and no more they do. There is no evidence of any purely savage and insulated tribe or nation becoming civilized. This has been shown by Whately and other writers. I held that the increase of capital and subsistence and of improvements in the moral and social condition of society was dependent on good government, peace, industry; all which were more or less of accidents; whereas the principle of population was of constant and universal application. It also appeared to me that the improvements in civilization and morals, which Mr. Tooke considered as having the effect of counteracting the principle, were intimately connected with some of the very checks upon the importance of which Mr. Malthus laid so much stress—

the regard to consequences, the respect for character, the dread of losing station" (RAP¹, VI, 265-66.)]

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¹⁰ [In this connection the reader may refer with advantage to Part I, Chap. I, sec. 3, in respect to the author's views on the relation of economics to ethics.]

¹¹ [Sixth Annual Report of the Registrar-General of England, 1844], p. xxx.

¹² [In this, as in other instances, the editor is responsible for defects, if any, in tabular arrangement, though no attempt has been made to verify Senior's figures with the original source.]

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¹³ [Sixth Annual Report of the Registrar-General of England, 1844], p. xxvii.

¹⁴ *Ibid.*, p. xxix.

¹⁵ *Ibid.*, p. xxxix.

¹⁶ [Corresponding statistics for the United States for the year 1844 are not available. Even at this date (1927) comparatively few states keep satisfactory records of vital statistics.]

According to the report of the Bureau of the Census on *Marriage and Divorce* for 1925 (the latest year available) there were 1,182,005 marriages in an estimated population of 115,378,094 (exclusive of population of counties for which marriage returns were lacking), or one marriage to ninety-eight inhabitants; *i. e.*, a higher marriage frequency than that which prevailed in Russia in Senior's time.

According to the publications of the Bureau of the Census on birth and mortality statistics for 1925 (the latest year available) there were 1,878,880 births (exclusive of stillbirths) in the birth-registration area of the United States comprising a population of 87,636,000, or a proportion of one birth to forty-six living individuals. In the same year (1925) there were 1,219,019 deaths from all causes (exclusive of stillbirths) in the death-registration area of the United States covering a population of 103,108,000, making one death annually to eighty-four living persons.]

¹⁷ [In connection with his functions as a member of this commission Senior prepared a *Preface* to these diplomatic reports, which was reprinted in 1835 as a separate publication under the title of *Statement of the Provision for the Poor, and of the Condition of the Laboring Classes, in a considerable portion of America and Europe.*]

¹⁸ Preface to Enumeration Abstract of 1831, pages 25, 44, 34, and 45.

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¹⁹ [The author remained until the end of his life a firm believer in voluntary limitation of offspring. In a conversation with a prominent Frenchman in April, 1861, Senior made the following observation:

"*Paucity of children seems to me to be essential to the welfare of peasant proprietors in an old country.* If you had 4½ children to a marriage, as we have, and your population doubled, as ours does every fifty years, you would soon cease to be mainly agricultural" (J¹⁰, I, 312).

In the spring of 1854 the Seniors, in company with the de Tocqueville family, visited a number of villages in the vicinity of the old city of Tours. It was customary for Senior to record his observations in a journal which he kept for

many years, and it may be of interest to quote a portion of his record in this connection.

"I am struck," Senior remarks, "during my walks and drives by the appearance of prosperity. The country about Tours is dotted with country-houses, quite as numerous as in any part of England. In St. Cyr alone there must be between twenty and thirty, and the houses of the peasants are far better than the best cottages of English laborers. Every one seems to have attached to it a considerable piece of land, from ten acres to two, cultivated in vines, vegetables and fruit. These and green crops are nearly the only produce; there is very little grain. All the persons whom I met appeared to be healthy and well-clad. The soil and climate are good, and the proximity to Tours insures a market; *but physical advantages are not enough to insure prosperity.* The neighborhood of Cork enjoys a good climate, soil, and market, but the inhabitants are not prosperous.

"After some discussion Tocqueville agreed with me in attributing the comfort of the Touraine to the slowness with which population increases. In the commune of Tocqueville the births are only three to a marriage, but both Monsieur and Madame de Tocqueville think that the number of children here is still less. I scarcely meet any.

"Marriages are late, and very seldom take place until a house and a bit of ground and some capital have been inherited or accumulated. Touraine is the best specimen of the *petite culture* that I have seen" (J¹, II, 74-75).

See also Part IV, note 90, giving the author's conversation with Thiers concerning the influence of large families on the excess of old maids in England as compared with that existing in France.]

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²⁰ Page 16.

²¹ Page 12.

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²² [The term "purity" in this case does not necessarily imply perfection. It has reference to consanguinity or close similarity in the character of the parties.]

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²³ [See also Part II, Chap. III, secs. 1 and 2 for a detailed discussion in regard to luxuries as related to decencies and necessities.]

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²⁴ [Among the extrinsic checks to population might be included immigration restrictions, settlement laws, and all other regulations and customs interfering with the mobility of labor. Writing in 1846 on the political situation in Switzerland, Senior made the following observations:

"Though the law is often relaxed in practice, a Swiss cannot legally travel in many parts of Switzerland without a passport, which confines him to a certain route and a certain period. Some cantons prohibit a stranger—that is to say, a native of another canton—from establishing himself within their frontiers. Others subject him to a fine, others to additional taxation, others require him to give security for his good behavior and solvency, others tolerate him, but subject him to the liabilities of arbitrary banishment. Some refuse to allow him to marry one of their citizens, others make him purchase the permis-

sion. Others sell to him the permission to marry out of his own canton. Thus, by a law of 1816, a Bernese who marries a woman of Soleure, pays about £3; and the woman about £6. The smuggling a wife without payment is a grave offense—subjecting not only the offender but all his family to severe penalties.

"In some, his claims as creditor or mortgagee are postponed to those of their own subjects. In almost all, the difficulty of acquiring citizenship is great, except to persons of wealth, and in many even to them. This will remind the reader of the state of the agricultural districts of England, under the old law of settlement and removal; when, to use Adam Smith's words, it was more difficult for a poor man to pass the artificial boundary of a parish than an arm of the sea, or a ridge of high mountains—when a hedge might separate places in one of which there was a surplus of hands, and in the other a deficiency—in one of which wages were unnecessarily high, and in the other lamentably low. But under the English law, a man could not be removed, except to his place of settlement. Until that was ascertained, or if it could not be ascertained, he was entitled to remain. In most of the cantons, a stranger is removable because he is a stranger. He is pushed off the frontier, and left to shift for himself.

"Hence have arisen the *Heimathlozes*, consisting of those who have never possessed or have lost the right of citizenship." (This restriction was gradually removed after the Revolution of 1848.—Editor.) "These are the 'gypsies' of Switzerland. Many of them have been wanderers for generations; the majority, indeed, are supposed to be the descendants of those who fled from Germany in the Thirty Years' War. Almost every canton attacks them by vagrant laws, almost as cruel as those of England in the last century. They are hunted from territory to territory; conceal themselves in the forests or in the low quarters of the larger towns; and, as the law forces them to be idle and miserable, revenge themselves by robbery and violence." A⁵, 177.]

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²⁵ [Cf. Part II, Chap. I, sec. 1; also Part V, Chap. IV, sec. 2.]

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²⁶ Page 14.

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²⁷ Page 339.

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²⁸ *Minutes of Evidence*, Part I, p. 79.

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²⁹ Pages 711 and 798.

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³⁰ ["What Senior says about the way landlordism has acted in England and about the way it has acted in Ireland is very remarkable and, in my judgment, is very accurate. Private property in land has acted similarly elsewhere in the world. Malthus gives many illustrations in his work on population. What Senior has to say should not be regarded as a defense of landlord and tenancy arrangement, or as a condemnation of such an arrangement. He is simply describing English conditions." Richard T. Ely.]

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³¹ Paper read before Statistical Society, December 18, 1843.

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³² Fifth Report [of the Registrar-General], p. 23.

³³ [General life tables (exclusive of those compiled by life insurance companies, which are based on selected risks) have been published by England, France, Germany, Italy, Sweden, and other European countries for many years. But no such data were available for the United States prior to 1916 when the Census Bureau published its preliminary report on *United States Life Tables*. These tables are based upon the estimated population of the original registration area on July 1, 1910, and the reported deaths in that area for 1909, 1910, and 1911. The original registration area covers only about one-fourth of the total population of the United States and includes the following states: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut, New York, New Jersey, Indiana, and Michigan, and the District of Columbia. Comparative data are presented for the first year of life by age intervals of one month, and by yearly intervals for the entire range of existence. The tables are arranged by sex, color, and locality. With regard to the white population separate tables are given for city dwellers as distinguished from those residing in rural districts, and natives are differentiated from foreigners.]

According to these tables, females have a *lower* rate of mortality than males; and this peculiarity of the so-called "weaker sex" holds good during infancy, childhood, youth, middle age and old age—in short, during the whole range of life. Native whites appear to have a lower rate of mortality than foreign-born whites for most ages. Whites of all classes have a much higher average longevity than negroes, and a similar advantage is shown for whites in rural districts as compared with those living in cities containing 10,000 or more inhabitants.]

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³⁴ [See Part II, Chap. I, sec. 4.]

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³⁵ [Cf. Part II, Chap. I, sec. 1; and Part V, Chap. III, sec. 1.]

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³⁶ [Includes farmers.]

³⁷ Page 154.

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³⁸ [The common prejudice against foreigners (including natives of foreign extraction who appear to be different from us in racial characteristics, religious ceremony, language, dress or etiquette) owes its origin, not to a single instinct, but to an intricate combination of causes—some real and some purely imaginary—which affect more or less seriously the sympathetic relationship between different classes of human beings. The predominant ingredients of this mental attitude are usually suspicion, fear, jealousy, and resentment—all based ultimately upon the instinct of self-preservation, though intensified by imitation and habit; but sometimes pride, vanity, patriotism and other sentiments play an important rôle.]

"The love of our nation," says Adam Smith (*Theory of Moral Sentiments*, Part VI, Sec. II, chap. 2), "often disposes us to view, with the most malignant jealousy and envy, the prosperity and aggrandizement of any other neighboring nation. Independent and neighboring nations, having no common superior to decide their disputes, all live in continual dread and suspicion

of one another. Each sovereign, expecting little justice from his neighbors, is disposed to treat them with as little as he expects from them. The regard for the laws of nations, or for those rules which independent states profess or pretend to think themselves bound to observe in their dealings with one another, is often very little more than mere pretense and profession. From the smallest interest, upon the slightest provocation, we see those rules every day, either evaded or directly violated without shame or remorse. Each nation foresees, or imagines it foresees, its own subjugation in the increasing power and aggrandizement of any of its neighbors; and the mean principle of national prejudice is often founded upon the noble one of the love of our own country. The sentence with which the elder Cato is said to have concluded every speech which he made in the senate, whatever might be the subject, '*It is my opinion likewise that Carthage ought to be destroyed*,' was the natural expression of the savage patriotism of a strong but coarse mind, enraged almost to madness against a foreign nation from which his own had suffered so much. The more humane sentence with which Scipio Nasica is said to have concluded all his speeches, '*It is my opinion likewise that Carthage ought not to be destroyed*,' was the liberal expression of a more enlarged and enlightened mind, who felt no aversion to the prosperity even of an old enemy, when reduced to a state which could no longer be formidable to Rome."]

³⁹ [Cf. Part X, Chap. I, sec. 1.]

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⁴⁰ [Cf. Part X, Chap. I, sec. 1 for details.]

⁴¹ [If Senior had witnessed the disastrous effects of the World War he would undoubtedly have modified his views in this respect. The Napoleonic War which lasted for a quarter of a century (1790-1815) resulted in the loss of about 2,000,000 lives; whereas in the recent war, which lasted nearly four and a half years, the deaths amounted to approximately 10,000,000. The average number of battle deaths (exclusive of fatal cases due to diseases and accidents) per annum amounted to about 80,000 during the Napoleonic War, and in the World War it amounted to approximately 2,200,000; in other words, the destruction of human life in the latter war as compared with that in the former was in the ratio of 28 to 1. Such a degree of destruction was, apparently, beyond the reach of Senior's imagination.]

⁴² [Compare Part II, Chap. I, sec. 3. The reader will, of course, appreciate that the author's remarks as to the origin of disease reflect expert opinions of a former age, which modern bacteriologists can scarcely accept. It will be admitted, however, that stagnation and filth are the great breeders of disease; and that fresh air, sunlight, and cleanliness are the great promoters of health.]

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⁴³ [Cf. Part IX, Chap. III, sec. 3.]

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⁴⁴ [See sec. 1 of this chapter.]

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⁴⁵ [Papers relating to the Unions and Workhouses in Ireland], 5th Series, pages 383-385.

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⁴⁶ [This was written shortly after the disastrous famine.]

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⁴⁷ *Agricultural Return*, pages 6, 8.

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⁴⁸ [This chapter was written in 1849. Since that time the United States has been steadily acquiring more and more territories. The following are the most important of our colonial possessions: Alaska (including the Aleutian Islands), Hawaii, Philippines, Porto Rico, Guam, Samoa, Panama Canal and its environs, Guatanamo (naval base in Cuba), the Virgin Islands; and special privileges in Yap and other islands in the Pacific mandated to us by the Treaty of Versailles. Besides these possessions, we have spheres of influence in the following, so-called independent, republics whose debts to private bankers we have deemed it our duty to settle, by virtue of the Monroe Doctrine, through military domination and control of customs: Haiti, Santo Domingo and Nicaragua—all in Central America; also the Negro republic of Liberia, in Africa.

Largely as a consequence of this colonial expansion, our military and naval expenses have grown enormously, especially since the Spanish-American war. The total military disbursements from 1900 to 1916, inclusive, amounted to \$4,300,278,000. During these 17 years of peace we spent on our army and navy \$1,349,476,000 *more* than during the preceding 34 years (1866-1899), and yet we were practically unprepared for the late war with Germany.]

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⁴⁹ [This situation is also described by an American author.] "There are very great evils" (says Chancellor Kent) "in the subdivision of estates when it is carried to extremes, and property divided into portions not large enough for the comfortable support of a family; but it would be wrong to suppose that the evils of the equal partition of estates have been seriously felt in the United States, or that they are to be anticipated for generations to come. The constant stream of emigration from the Atlantic to the interior states operates sufficiently to keep paternal inheritances unbroken. The tendency, as experience in some of the Eastern states would seem to confirm, is rather to enlarge than abridge them; and the eldest heir is judiciously allowed to elect to take the whole, paying the others an equivalent in money." *Commentaries*, Vol. IV, p. 385. [Ln²⁶, 25.]

⁵⁰ *Démocratie*, Vol. II, p. 203.

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⁵¹ Mr. Minturn's evidence, House of Lords Committee on Colonization, 1848, question 3321.

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⁵² *Progress of United States*, p. 84.

⁵³ Mr. Minturn's evidence, House of Lords Committee on Colonization, 1848, questions 319 and 3,200.

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⁵⁴ [The following Table analyzes the growth of immigration into the United States for one hundred years, by countries of origin for each decade during the period 1820 to 1919 (both inclusive), and for each quinquennial period during the twenty years 1900 to 1919. This compilation is based upon the more detailed statistics given in the Annual Report of the Commissioner General of Immigration for the fiscal year ended June 30, 1919.]

INFLUX OF IMMIGRATION INTO THE UNITED STATES, BY COUNTRIES OF ORIGIN, FOR 100 YEARS (1820 TO 1919)

Years	Total	United Kingdom (including Ireland)		Germany		Austria-Hungary		Italy		Russia		Scandinavia		All Other Countries		All Countries Per cent of To- tal for 100 Years
		Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent	
1820-1829	128,502	77,953	60.66	5,753	4.48	.....	.....	429	.33	86	.07	264	.21	44,017	34.25	.39
1830-1839	538,381	245,022	45.51	124,726	23.17	.....	.....	2,225	.41	280	.05	2,076	.39	164,052	30.47	1.63
1840-1849	1,427,337	874,717	61.28	385,434	27.00	.....	.....	1,476	.10	520	.04	13,060	.91	152,130	10.66	4.31
1850-1859	2,747,897	1,445,081	52.59	952,720	34.67	.....	.....	8,258	.30	542	.02	24,815	.90	316,481	11.52	8.30
1860-1869	2,423,219	990,299	46.64	746,935	35.18	.....	.....	10,238	.48	3,676	.17	97,104	4.57	271,598	12.79	6.41
1870-1879	2,742,137	1,000,681	36.49	751,769	27.42	3,369	1.6	46,301	1.69	46,193	1.68	208,101	7.59	628,965	22.94	8.28
1880-1889	5,248,569	1,484,806	28.29	1,445,181	27.53	60,127	6.00	267,661	5.10	201,709	3.84	671,783	12.80	862,639	16.44	15.86
1890-1899	3,594,294	734,385	20.43	579,072	16.11	314,790	6.00	603,761	16.80	450,101	12.52	390,728	10.87	302,188	8.41	10.86
1900-1909	8,202,388	814,456	9.93	328,722	4.01	2,001,376	24.40	1,930,475	23.34	1,501,501	18.30	488,208	5.95	1,137,850	13.87	24.78
1910-1919	6,347,380	538,275	8.48	174,227	2.74	1,154,727	18.19	1,229,916	19.38	1,106,998	17.44	238,275	3.75	1,904,962	30.01	19.18
1820-1919	33,100,104	8,205,675	24.79	5,494,539	16.60	4,068,448	12.29	4,100,740	12.39	3,311,406	10.00	2,134,414	6.45	5,784,882	17.48	100.00
1900-1904	3,255,149	296,356	9.10	154,928	4.76	783,393	24.07	838,424	25.76	564,625	17.35	262,166	8.05	355,257	10.91	9.83
1905-1909	4,947,239	518,100	10.47	173,794	3.51	1,217,983	24.62	1,092,051	22.07	936,676	18.93	226,042	4.57	782,593	15.82	14.95
1910-1914	5,174,701	445,892	8.62	161,195	3.12	1,129,653	21.83	1,104,833	21.35	1,054,608	20.38	179,764	3.47	1,098,756	21.23	15.63
1915-1919	1,172,679	92,383	7.88	13,032	1.11	25,074	2.14	125,083	10.67	52,390	4.47	58,511	4.99	806,206	68.75	3.54

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⁵⁵ Report of the Commissioners of Emigration for 1849, p. 1.

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⁵⁶ [In September, 1852, Senior visited the city of Cork in Ireland. This is what he observed on that occasion:

"The whole town is covered with placards announcing emigrant ships for America and Australia, of enormous burden—the 'Gallatin,' 3,500 tons; the 'Iowa,' 3,000, and many of 2,800 tons. The tonnage of the 'Windsor Castle,' of 140 guns, just launched at Pembroke, and said to be the largest ship of war in the world, is only 3,153 tons" J⁴, II, 11.]

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⁵⁷ [The tabular analysis appended to sec. 2 of the last chapter (note 54) indicates the wave of immigration to the United States for one hundred years, by countries of origin only. On July 1, 1898, the Bureau of Immigration began to keep a record of alien arrivals by race or people, in addition to country of origin. The following statement gives the total immigration to the United States, for each class of immigrants, in the order of importance, during the twenty-one years from July 1, 1898, to June 30, 1919. It indicates a radical change in the migratory qualities of certain "races" since the author's time.]

THE STREAM OF AMERICAN IMMIGRATION, BY RACE OR NATIONALITY,
FROM JULY 1, 1898 TO JUNE, 30, 1919

Rank	Race or Nationality	Number of Immigrants	
1	Italian:		3,352,047
	from South	2,813,617	
	from North	538,430	
2	British and Irish:		1,742,217
	English	769,774	
	Irish	658,981	
	Scotch	279,793	
	Welsh	34,669	
3	Jewish		1,551,315
4	Polish		1,420,771
5	German		1,092,720
6	Scandinavian		818,589
7	Slovak		480,286
8	Magyar		461,997
9	Croatian and Slovenian		461,768
10	Greek		441,387
11	French		267,112
12	Ruthenian (Russniak)		260,040
13	Lithuanian		256,605
14	Russian		237,357
15	Japanese		223,188
16	Finnish		211,611
17	Mexican		197,817
18	Dutch and Flemish		162,974
19	Bulgarian, Serbian, and Montenegrin		150,582
20	Portuguese		143,653
21	Bohemian and Moravian (Czech)		141,669
22	Roumanian		136,784
23	Spanish		130,411
24	African (black)		91,927
25	Syrian		89,971
26	Cuban		70,538
27	Armenian		55,570
28	Bosnian, Dalmatian, and Herzegovinian		49,969
29	Chinese		39,705
	All others		119,903
	Grand Total		14,861,483

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⁵⁸ [In recent years the great evil has been—not the dispersion but rather the

undue concentration of immigrants, by racial groups or "colonies," in the overcrowded tenement sections of our large cities, thus introducing new social and economic problems.]

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⁵⁹ [This chapter was written in 1850.]

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⁶⁰ *Art of Colonization*, p. 349.

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⁶¹ [*Ibid.*, pp. 347-8.]

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⁶² [Senior on one occasion (May 13, 1854) asked M. Circourt, the distinguished Lorrainian, what the latter considered to be the mission of England.

Senior.—"Is it, as Sydney Smith said, to make calico?"

Circourt.—"The missions of England have been many. One was to introduce into the world representative government; another was to give it free trade; another is to keep alive for happier times the embers of liberty that still remain in Europe. But your great mission is that which was foretold by Shakespeare with his wonderful spirit of prophecy, not twenty years after the Pilgrim Fathers first set foot in the new world. It is to found empires; to be *magna virum mater*; to scatter wide the civilized man. Fifty years hence the United States will be more populous, richer, and more powerful than any European community. Two hundred years hence Australia will be a greater nation, or system of nations, than the present United States. Three or four hundred millions of men, the most energetic in the world, will then speak English. French, Italian, and German will be dialects, as comparatively insignificant as Dutch and Portuguese are now. Those who desire wide and permanent fame should write in English." J', I, 411.]

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⁶³ [*Cf.* Part X, Chap. I, sec. 1.]

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⁶⁴ Second Report from the Select Committee of the House of Lords on Colonization from Ireland, 1848, Mr. Minturn's evidence no. 3292.

[Offhand, one might suppose that the tremendous development of railroad transportation since 1848 should have resulted in a large reduction of passenger rates. That, however, is far from being the case. The following are the lowest rates for the corresponding distances given in the text, as of January, 1925.

<i>New York to:</i>	<i>Rate</i>
Buffalo.....	\$15.82
Cleveland.....	20.55
Detroit.....	24.82
Chicago.....	32.70
Milwaukee.....	35.76

It will be noted that present rates are about four times as high as those which prevailed 75 years ago. Since that time, however, the purchasing power of the dollar has declined to about $\frac{1}{3}$ of what it was in 1848; in other words, the general price level is now about three times as high as it used to be 75 years ago. It appears, therefore, that the rise in passenger rates (in so far as the above figures indicate) has exceeded that of commodity prices. On the other hand, one must bear in mind that the modern traveler enjoys more comforts than his predecessor ever dreamt of, while accidents have been reduced to a minimum.]

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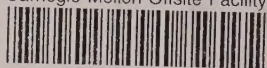
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